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THE JOURNAL
OF
HELLENIC STUDIES



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THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

THE JOURNAL
OF
HELLENIC STUDIES

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RULES

OF THE

Society for the Promotion of Hellenic Studies.

I. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archaeological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archaeological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty

3. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof, and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13. Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President shall be elected by the Members of the Society at the Annual Meeting for a period of five years, and shall not be immediately eligible for re-election.

17. The Vice-Presidents shall be elected by the Members of the Society at the Annual Meeting for a period of one year, after which they shall be eligible for re-election.

18. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

19. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

20. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

21. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

22. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

23. Upon any vacancy in the Presidency occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

24. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

25. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed: no such election to be valid unless the candidate receives the votes of the majority of those present.

26. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year; this annual subscription may be compounded for by a single payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1905, shall pay on election an entrance fee of two guineas.

27. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

28. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

29. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1; otherwise they will be held liable for the subscription for the current year.

30. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

31. The Council shall have power to nominate British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

32. The Council may, at their discretion, elect for a period not exceeding five years Student-Associates, who shall be admitted to certain privileges of the Society.

33. The names of Candidates wishing to become Student-Associates shall be submitted to the Council in the manner prescribed for the Election of Members. Every Candidate shall also satisfy the Council by means of a certificate from his teacher, who must be a person occupying a recognised position in an educational body and be a Member of the Society, that he is a *bonâ fide* Student in subjects germane to the purposes of the Society.

34. The Annual Subscription of a Student-Associate shall be one guinea, payable and due on the 1st of January in each year. In case of non-payment the procedure prescribed for the case of a defaulting Ordinary Member shall be followed.

35. Student-Associates shall receive the Society's ordinary publications, and shall be entitled to attend the General and Ordinary Meetings, and to read in the Library. They shall not be entitled to borrow books from the Library, or to make use of the Loan Collection of Lantern Slides, or to vote at the Society's Meetings.

36. A Student-Associate may at any time pay the Member's entrance fee of two guineas, and shall forthwith become an Ordinary Member.

37. Ladies shall be eligible as Ordinary Members or Student-Associates of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members or Student-Associates.

38. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

RULES FOR THE USE OF THE LIBRARY

AT 22, ALBEMARLE STREET.

I. THAT the Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Hon. Librarian and Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Hon. Librarian, Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from eleven A.M. to six P.M. (Saturdays, 11 A.M. to 2 P.M.), when either the Librarian, or in his absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation from July 20 to August 31 (inclusive).

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

(1) That the number of volumes lent at any one time to each Member shall not exceed three.

(2) That the time during which such book or books may be kept shall not exceed one month.

(3) That no books be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

(1) That all requests for the loan of books be addressed to the Librarian.

(2) That the Librarian shall record all such requests, and lend out the books in the order of application.

(3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.

(4) Should a book not be returned within the period specified, the Librarian may reclaim it.

- (5) All expenses of carriage to and fro shall be borne by the borrower.
- (6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances :—

- (1) Unbound books.
- (2) Detached plates, plans, photographs, and the like.
- (3) Books considered too valuable for transmission.
- (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

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Applications for books and letters relating to the Photographic Collections, and Lantern Slides, should be addressed to the *Librarian* (Mr. J. ff. Baker-Penoyre), at 22, Albemarle Street, W.

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 Baker, H. T., 3, *Temple Gardens, E.C.*
 Baker-Penoyre, J. H. (Secretary & Librarian), 8, *King's Bench Walk, Inner Temple, E.C.*
 Baker-Penoyre, Rev. Slade, *Edenholme, Cheltenham.*
 *Balfour, Right Hon. A. J., M.P., 4, *Carlton Gardens, S.W.*
 *Balfour, Right Hon. G. W., *Fishers' Hill, Woking, Surrey.*
 Ball, Sidney, *St. John's College, Oxford.*
 Barclay, Edwin, *Urie Lodge, Wimbledon.*
 Barker, E. Phillips, 10, *Kedcliffe Road, Nottingham.*
 †Barlow, Miss Annie E. F., *Greenthorne, Edgworth, Bolton.*
 Barlow, Lady, 10, *Wimpole Street, W.*
 Barnsley, Sidney H., *Pinbury, near Cirencester.*
 Barran, J. N., *Westwood, Leeds.*
 Bather, Rev. Arthur George, *Sunnyside, Winchester.*
 Battle, Professor William James, *Austin, Texas.*
 Beare, Prof. John L., 9, *Trinity College, Dublin.*
 †Beaumont, Somerset, *Shere, near Guildford.*
 Bell, H. L., *British Museum, W.C.*
 Bell, Miss Gertrude, 95, *Sloane Street, S.W.*
 †Bencke, P. V. M., *Magdalen College, Oxford.*
 †Benn, Alfred W., *Il Cingio, San Gervasio, Florence.*
 Bennett, S. A., *Hill House, Ewelme, Wallingford.*
 Benson, Frank Sherman, 214, *Columbia Heights, Brooklyn, New York, U.S.A.*
 Bent, Mrs. Theodore, 13, *Great Cumberland Place, W.*
 †Bernays, A. E., 3, *Priory Road, Kew, Surrey.*
 Bertram, Anton, *Nicosia, Cyprus.*
 Bevan, E. R., *Bunwell Abbey, Somerset.*
 Bickersteth, C. F., *West Lodge, Ripon, Yorks.*
 Bickford-Smith, R. A. H.
 Bienkowski, Prof. P. von, *Basztowa, 5, Krakau.*
 Biggs, Rev. R. C. Davey, D.D., *St. John's College, Oxford.*

- Bigham, F. T., 27, *Cheyne Walk, Chelsea, S.W.*
 †Bikelas, Demetrius, LL.D., *Athens, Greece.*
 Billson, Charles J., *The Wayside, Oadby, Leicester.*
 †Bissing, Dr. von, *Leopoldstrasse, 54, München.*
 Blakiston, C. H., *Eton College, Windsor.*
 Blunt, A. W. F., *Exeter College, Oxford.*
 Bodington, Prof. N., *Vice-Chancellor of the University of Leeds, Leeds.*
 Bond, Edward, *Thurloe Square, S.W.*
 Booth, Miss Harriet, 46, *Ullet Road, Sefton Park, Liverpool.*
 Bosanquet, Prof. R. Carr (Council), *Institute of Archaeology, 40 Bedford St. Liverpool.*
 Bousfield, Sir William, 20, *Hyde Park Gate, S.W.*
 Boyd, Rev. Henry, D.D., *Principal of Hertford College, Oxford.*
 Boys, Rev. H. A., *North Cadbury Rectory, Bath.*
 Bramley, Rev. H. R., *Nettleham Field, Lincoln.*
 Bramwell, Miss, 73, *Chester Square, S.W.*
 Brightman, Rev. F. E., *Magdalen College, Oxford.*
 Brinton, Hubert, *Eton College, Windsor.*
 Briscoe, Miss, *Neach Hill, Shifnal.*
 Broadbent, H., *Eton College, Windsor.*
 Brooke, Rev. A. E., *King's College, Cambridge.*
 Brooke, Rev. Stopford A., 1, *Manchester Square, W.*
 Brooks, E. W., 28, *Great Ormond Street, W.C.*
 Brooksbank, Mrs., *Leigh Place, Godstone.*
 Brown, Adam, *Netherby, Galashiels.*
 Brown, A. C. B., *Aston Vicarage, Stone, Staffordshire.*
 Brown, Prof. G. Baldwin, *The University, Edinburgh.*
 †Brown, James, *Netherby, Galashiels, N.B.*
 Brown, S. R., *Epsom College, Surrey.*
 Browne, Rev. Henry, *University College, Dublin.*
 *Bryce, The Right Hon. James, D.C.L., Litt.D., M.P., 54, *Portland Place, W.*
 Bull, Rev. Herbert, *Wellington House, Westgate-on-Sea.*
 Bûls, M. Ch., 40, *Rue du Beau-Site, Bruxelles.*
 Burdon, Rev. Rowland John, *St. Peter's Vicarage, Chichester.*
 Burge, Rev. Hubert M., *The College, Winchester.*
 †Burnaby, R. B., *Trinity College, Glenalmond, Perth.*
 Burnet, Prof. J., 1, *Alexandra Place, St. Andrews, N.B.*
 Burrows, Prof. Ronald, *University College, Cardiff.*
 Burton Brown, Mrs., *Priors Field, Godalming.*
 Bury, Prof. J. B., LL.D., Litt.D., D.Litt., *King's College, Cambridge.*
 Butcher, S. H., Litt.D., LL.D., D.Litt., M.P. (V.P.), 6, *Tavistock Square, W.C.*
 Butler, Arthur J., *Wood End, Weybridge.*
 Butler, H. E., *New College, Oxford.*
 *Butler, The Very Rev. H. M., D.D., *Master of Trinity College, Cambridge.*
 Buxton, F. W., 42, *Grosvenor Gardens, S.W.*
 Buxton, Mrs. Alfred W., 32, *Great Cumberland Place, W.*
 Bywater, Prof. Ingram, Litt.D., D. Litt. (V.P.), 93, *Onslow Square, S.W.*
 †Bywater, Mrs., 93, *Onslow Square, S.W.*
 Callander, Prof. T., *Queen's University, Kingston, Canada.*
 †Calvecoress, L. M., *Messrs. Ralli Bros., Mellor's Bldgs., Exchange St. East, Liverpool.*
 Cambridge, A. W. Pickard, 22, *St. Margaret's Road, Oxford.*
 Cambridge, W. A. Pickard, *The College, Winchester.*
 *Campbell, Rev. Prof. Lewis, D.Litt., LL.D. (V.P.), 6, *Arlington Street, Piccadilly, W.*
 Campbell, Mrs. Lewis, 6, *Arlington Street, Piccadilly, W.*
 Capes, Rev. Canon W. W., *The Close, Hereford.*
 Capper, Prof. S. H., *Victoria University, Manchester.*
 Carapános, Constantin, Député, *Athens.*
 Carey, Miss, c/o T. Brooksbank, Esq., *Belford Lodge, 5, St. John's Road, Putney, S.W.*
 *Carlisle, A. D., *Haileybury College, Hertford.*

- Carlisle, Miss Helen, *Houndhill, Marchington, Stafford.*
- *Carmichael, Sir T. D. Gibson, *Castleknig, Dolphinton, N.B.*
- Carpenter, Rev. J. Estlin, 109, *Banbury Road, Oxford.*
- *Carr, Rev. A., *Addington Vicarage, Croydon.*
- †Carr, H. Wildon, *Bury, Pulborough, Sussex.*
- Cart, Rev. Henry, 49, *Albion Court, Kensington Gore, W.*
- Carter, Frank, *Ashdene, Winchester.*
- Carter, Reginald, *Rector of Edinburgh Academy, Edinburgh.*
- †Carthew, Miss, 152, *Kensington Palace Gardens, W.*
- Case, Miss Janet, 5, *Windmill Hill, Hampstead, N.W.*
- Case, Prof. T., *President of Corpus Christi College, Oxford.*
- Caton, Richard, M.D., *Holly Lea, Livingstone Drive South, Liverpool.*
- Cattley, T. F., *Eton College, Windsor.*
- Chambers, B. E. C., *Grayswood Hill, Haslemere, Surrey.*
- Chambers, C. Gore, *Hertford House, de Parys Avenue, Bedford.*
- Chambers, Charles D., 14, *Mansfield Road, Reading.*
- Chambers, Edmund Kirchner, 9, *Langdown Crescent, W.*
- Chance, Frederick, 30, *Lennox Gardens, S.W.*
- Chapman, R. W., 10, *St. John Street, Oxford.*
- Chavasse, A. S., *Elmthorpe, Convey, near Oxford.*
- †Chawner, G., *King's College, Cambridge.*
- †Chawner, W., *Master of Emmanuel College, Cambridge.*
- Cheetham, J. Frederick, *Eastwood, Staleybridge.*
- Cheetham, J. M. C., *Eyford Park, Bourton-on-the-Water, R.S.O., Gloucestershire.*
- Childers, Mrs. Erskine, 13, *Embankment Gardens, Chelsea, S.W.*
- Chitty, Rev. George J., *Eton College, Windsor.*
- Cholmeley, Professor R. J., *Rhodes University College, Grahamstown, S. Africa.*
- Church, Rev. Canon C. M., *The Liberty, Wells.*
- Christian, J. Henry.
- Christian, Rev. G., *The Vicarage, Rillesdon, nr. Leicester.*
- Christie, A. H., *Park Corner, Ewell, Surrey.*
- Christie-Miller, S. R., 21, *St. James's Place, W.*
- Churchill, E. L., *Eton College, Windsor.*
- Clark, A.
- Clark, Charles R. R., 10, *Cheyne Row, Chelsea, S.W.*
- Clark, J. W., *Scroope House, Cambridge.*
- Clark, Rev. R. M., *Donstone College, Staffordshire.*
- †Clark-Maxwell, Rev. W. Gilchrist, *Chunbury Vicarage, Ashton-on-Clee, Salop.*
- Clarke, Somers, 48, *Albert Court, Kensington Gore, S.W.*
- †Clayson, A. C., *Hawkehead House, Hatfield, Herts.*
- Clay, C. F., 123, *Inverness Terrace, W.*
- Cleika, Miss Agnes, 68, *Redcliffe Square, S.W.*
- Cobbold, Felix T., M.P., *The Lodge, Felixstowe, Suffolk.*
- *Cobham, C. Delaval, C.M.G., *H.R.M. Commissioner, Larnaca, Cyprus.*
- Cockerell, S. Pepys, 35, *Phillimore Gardens, Kensington, W.*
- Cohen, Herman, 1, *Lower Terrace, Frognal, N.W.*
- Cole, A. C., 64, *Portland Place, W.*
- *Colvin, Sidney (V.P.), *British Museum, W.C.*
- Compton, Rev. W. C., *The College, Dover.*
- Connal, B. M., *The Yorkshire College, Leeds.*
- Conway, Sir W. M., *The Red House, 21, Hornon Street, W.*
- Conybeare, E. C., 13, *Norham Gardens, Oxford.*
- Cook, Arthur Bernard, *Queens' College, Cambridge.*
- Cook, E. T., 1, *Gordon Place, Twickenham Square, W.C.*
- Cook, T. A., 54, *Oakley Street, S.W.*
- Cooke, Rev. A. H., *Aldonham School, Elstree, Herts.*
- Cooke, Richard, *The Croft, Delling, Maidstone.*
- Cookson, C., *Magdalen College, Oxford.*

- Cooper, Rev. James, D.D., *The University, Glasgow*.
- Corbet, His Honour Eustace K., C.M.G., *Native Court of Appeal, Calcutta*.
- Corbett, Miss Margery, *Woodgate, Danehill, Sussex*.
- Corgialegho, M., 53, *Mount Street, Berkeley Square, W.*
- Corley, Ferrand E., *St. John's College, Oxford*.
- Cornford, F. M., *Trinity College, Cambridge*.
- Correra, Louis, D.L., 241, *Via Saverio Correra, Napoli, Italy*.
- Coupland, Reginald, *New College, Oxford*.
- Cowper, H. Swainson, *High House, Hawkshead, Lancashire*.
- Grace, J. E., *Eton College, Windsor*.
- †Crawford, G. R., 119, *Gloucester Terrace, Hyde Park, W.*
- Credson, Miss G., *Homewood, Woburn Sands, R.S.O., Beds.*
- Credson, Wilson, *Southside, St. Leonards-on-Sea*.
- Croft, George C., 5, *Green Street, Park Lane, W.*
- Cromer, H.E. the Earl of, O. M., *Cairo, Egypt*.
- Cronin, Rev. H. S., *Trinity Hall, Cambridge*.
- Crooke, W., *Langton House, Charlton Kings, Cheltenham*.
- †Crossman, C. Stafford, 67, *Portchester Terrace, W.*
- Crowfoot, J. W., *Khartoum, Soudan*.
- Cumliffe, R. J., 121, *West George Street, Glasgow*.
- Cust, Lionel, *Oliphant House, The Crescent, Windsor*.
- Cust, Miss Anna Maria, 63, *Elm Park Gardens, Faltham Road, S.W.*
- Cust, Miss Beatrice, 13, *Ecceleston Square, S.W.*
- Dakyns, Geo. D., *Grammar School, Morpeth*.
- Dakyns, H. G. (Council), *Higher Combe, Haslemere, Surrey*.
- Dalrymple, J. D. G., *Meiklewood, Stirling, N.B.*
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- Daniel, A. M., 14, *Royal Crescent, Scarborough*.
- Daniel, Mrs. A. M., 14, *Royal Crescent, Scarborough*.
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- Danson, F. C., R., 22 and 23, *Liverpool and London Chambers, Liverpool*.
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- †Dawes, Miss E. A. S., M.A., D.Litt., *Weybridge, Surrey*.
- Dawkins, R. M., *British School, Athens*.
- Dawson, Rev. A. P., *School House, Kibworth, Leicester*.
- Dayton, Captain E. Winthrop, 763, *Fifth Avenue, New York, U.S.A.*
- De Burgh, W. G., *University College, Reading*.
- †De Filippi, Madame, 167, *Via Urbano, Rome*.
- †De Ges, R. O., *Clifton College, Bristol*.
- De Saumarez, Lord, *Shrubland Park, Coddlenham, Suffolk*.
- Desborough, Right Hon. Baron, 37, *Grosvenor Square, S.W.*
- †Deubner, Frau Dr., 24, *Marienstrasse, Bonn-am-Rhein*.
- Devonshire, His Grace the Duke of, K.G., *Devonshire House, Piccadilly, W.*
- Dickins, G., *British School, Athens, Greece*.
- Dickson, Miss Isabel A., 69, *Beaufort Mansions, Beaufort Street, S.W.*
- Dill, Prof. S., *Montpelier, Malone Road, Belfast*.
- Dobson, Miss, c/o Miss E. M. de Lantour, 43, *Warwick Road, Earl's Court, S.W.*
- Donaldson, James, LL.D., *Principal of the University, St. Andrews*.
- Donaldson, Rev. S. A., *Master of Magdalene College, Cambridge*.
- Douglas-Pennant, the Hon. Alice, *Mortimer House, Halkin Street, S.W.*
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- †Droop, J. P., 11, *Cleveland Gardens, Hyde Park*.
- Drummond, Allan, 7, *Ennismore Gardens, S.W.*
- Dryhurst, A. R., 11, *Downshire Hill, Hampstead, N.W.*
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- Duhn, Prof. von, *University, Heidelberg*.

- Du Pontet, C. A. A., *Tunstall House, Harrow-on-the-Hill*.
 Duke, Roger, 9, *Pelham Crescent, S.W.*
 Durning-Lawrence, Sir Edwin Bart., 13, *Carlton House Terrace, S.W.*
 Dyer, Louis (Council), *Sunbury Lodge, Banbury Road, Oxford*.
 Dyson, Reginald, *Onkwood, Kirkburton, Huddersfield*.
 Earp, F. R., *The Warren, Upper Warlingham, Surrey*.
 Edgar, C. C., *Turf Club, Cairo*.
 Edmonds, J. Maxwell, *The School, Repton, Burton-on-Trent*.
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 Edwards, Thos. John, 4, *Holland Park, W.*
 †Egerton, H.E. Sir Edwin H., G.C.B., H.B.M. Ambassador, *British Embassy, Rome*
 Egerton, Mrs. Hugh, 11, *Tite Street, Chelsea, S.W.*
 Eld, Rev. Francis J., *Polstead Rectory, Colchester*.
 Ellum, E., *Dean Close Memorial School, Cheltenham*.
 †Elliot, Sir Francis E. H., K.C.M.G., H.B.M. Minister, *British Legation, Athens*.
 Ellis, Prof. Robinson, *Trinity College, Oxford*.
 Elwell, Levi H., *Amherst College, Amherst, Mass., U.S.A.*
 Ely, Talfourd, D.Lit. (Council), 3, *Hove Park Gardens, Hove, Brighton*.
 Eumorfopoulos, N., 35, *Gloucester Square, Hyde Park, W.*
 Evans, A. J., LL.D., D.Litt., F.R.S. (V.P.), *Ashmolean Museum, Oxford*.
 Evans, F. Gwynne, *The Vale House, Stamford*.
 Evans, Sir John, K.C.B., D.C.L., F.R.S., *Britwell, Berkhamstead, Berks*.
 †Evans, Lady (Council), *Britwell, Berkhamstead, Berks*.
 Evans, Richardson, 1, *Camp View, Wimbledon*.
 Eve, H. W., 37, *Gordon Square, W.C.*
 Ewart, Miss Mary A., 68, *Albert Hall Mansions, S.W.*
 Exeter, The Right Rev. The Lord Bishop of, D.D., *The Palace, Exeter*.
 Fairbairn, Rev. A. M., D.Litt., *Mansfield College, Oxford*.
 Fairclough, Prof. H. R., *Stanford University, Cal., U.S.A.*
 Fanshawe, Reginald, 7, *Kemble Road, Oxford*.
 Farnell, L. R., D.Litt. (Council), *Exeter College, Oxford*.
 Farside, William, *Thorpe Hall, Robin Hood's Bay, Yorkshire*.
 Fegan, Miss E. S., 135, *Lauderdale Mansions, W.*
 Felkin, F. W., *University College School, Gower Street, W.C.*
 Fenning, Rev. W. D., *Halleybury College, Hertford*.
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 Fintay, The Right Hon. Sir Robert, K.C., 31, *Phillimore Gardens, Kensington, W.*
 Fisher, H. A. L., *New College, Oxford*.
 Flather, J. H., 90, *Hills Road, Cambridge*.
 Fletcher, F., *The College, Marlborough*.
 Fletcher, F., *Brenzell, Banister Road, Southampton*.
 Fletcher, H. M., 10, *Lincoln's Inn Fields, W.C.*
 Fletcher, Banister F., 29, *New Bridge Street, Ludgate Circus, E.C.*
 Floyd, G. A., *Knowle Cottage, Tunbridge*.
 Foat, F. W. G., D.Litt., *City of London School, Victoria Embankment, E.C.*
 †Forbes, W. H., *Balliol College, Oxford*.
 Ford, Lady, *Shamrock Cottage, Lymington, Hants*.
 Ford, Rev. Lionel, *Repton Hall, Burton-on-Trent*.
 Forster, F. M., *Harnham, Monument Green, Weybridge*.
 Forster, E. S., *The University, Sheffield*.
 Fotheringham, J. K., *Magdalen College, Oxford*.
 Fowler, Harold N., Ph.D., *Western Reserve University, Cleveland, Ohio, U.S.A.*
 Fowler, W. Ward, *Lincoln College, Oxford*.
 Frazer, J. G., LL.D., D.Litt., D.C.L., *Trinity College, Cambridge*.
 Freeman, W. George, 163, *Parkdale Road, Plumstead*.
 †Freshfield, Douglas W. (Hon. Treasurer), 1, *Airlie Gardens, Campden Hill, W.*
 †Freshfield, Edwin, LL.D., 31, *Old Jewry, E.C.*
 Frost, K. T., *Turf Club, Cairo*.

- Fry, Right Hon. Sir Edward, D.C.L., *Failand House, Failand, near Bristol*.
 Fry, F. J., *Cricket St. Thomas, Chard*.
 Fry, Rev. T. C., D.D., *The School, Great Berkhamstead*.
 †Furley, J. S., *Chernocke House, Winchester*.
 Furneaux, L. R., *Rossall School, Fleetwood*.
 Furness, Miss S. M. M., 2, *Myrcnae Road, Blackheath, S.E.*
 Fyfe, Theodore, 4, *Gray's Inn Square, W.C.*
 Fyfe, W. H., *Merton College, Oxford*.
 Gage, Mrs. H. Calvin, 4, *Dupont Circle, Washington, D.C., U.S.A.*
 Gardiner, E. Norman (Council), *Epsom College, Surrey*.
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 ††Gardner, Prof. Percy, Litt.D. (V.P.), 12, *Canterbury Road, Oxford*.
 Gardner, Samuel, *Oakhurst, Harrow-on-the-Hill*.
 Gardner, W. Amory, *Groton, Massachusetts, U.S.A.*
 Garnett, Mrs. Terrell, 3, *Queen Anne's Gate, S.W.*
 †Gaselee, S., 75, *London Gardens, Rayswater, W.*
 Gaskell, Miss K., *The Uplands, Great Shelford, Cambridge*.
 Gatliff, Hamilton, 11, *Eaton Square, S.W.*
 Geikie, Sir Archibald, F.R.S., Sc.D., D.C.L., 3, *Sloane Court, S.W.*
 †Genner, E., *Jesus College, Oxford*.
 †Gerrans, H. T., 20, *St. John's Street, Oxford*.
 Gibson, George, 2, *Stirling Mansions, Canfield Gardens, Hampstead, N.W.*
 Gibson, Mrs. Margaret D., *Castle-braz, Chesterton Road, Cambridge*.
 Giles, P., *Emmanuel College, Cambridge*.
 Gilkes, A. H., *The College, Dulwich, S.E.*
 Gillespie, C. M., 15, *Regent's Park Avenue, Hyde Park, Leeds*.
 Giveen, Rev. R. L., 66, *Myddelton Square, Clerkenwell, E.C.*
 Glover, Miss Helen, *c/o The Manager, London and County Bank, Victoria Street, S.W.*
 Godden, Miss Gertrude M., *Kincairney, Weybridge, Surrey*.
 Godley, A. D., 4, *Crick Road, Oxford*.
 Goodhart, A. M., *Eton College, Windsor*.
 Goodhart, J. F., M.D., LL.D., 25, *Portland Place, W.*
 Goodison, Mrs., *Halsteads, near Kirkby, Lonsdale*.
 Goodspeed, Edgar J., *The University, Chicago, U.S.A.*
 Gosford, The Countess of, 22, *Mansfield Street, Cavendish Square, W.*
 Gow, Rev. James, Litt.D., 19, *Dean's Yard, Westminster, S.W.*
 Granger, F. S., *University College, Nottingham*.
 Graves, A. S., *St. Martin's, Cambridge*.
 Gray, Rev. H. B., *Bradfield College, Berks.*
 Green, G. Buckland, 35, *St. Bernard's Crescent, Edinburgh*.
 Green, Mrs. J. R., 36, *Gravenor Road, S.W.*
 Greene, C. H., *The School, Great Berkhamstead*.
 Greene, Herbert W., *Magdalen College, Oxford*.
 Greenwell, Rev. W., F.R.S., *Durham*.
 Grenfell, B. P., Litt.D., D.Litt. (Council), *Queen's College, Oxford*.
 Griffith, F. L., *Riverdale, Ashton-under-Lyne*.
 Griffith, Miss Mary E., 4, *Bramham Gardens, S.W.*
 Grundy, George Beardo, D.Litt., 27, *St. Margaret's Road, Oxford*.
 Gurney, Miss Amelia, 69, *Ennismore Gardens, S.W.*
 †Gutch, Clement, *King's College, Cambridge*.
 Guthrie, C. I., 13, *Royal Crescent, Edinburgh*.
 Hadow, W. H., *Worcester College, Oxford*.
 Haigh, Mrs. P. B., *Karwar, N. Kanara, Bombay Presidency, India*.
 Haines, C. R.,
 Hall, Rev. F. H., *Oriel College, Oxford*.
 Hall, Rev. F. J., *Northam Place, Potter's Bar, Herts.*
 Hall, F. W., *St. John's College, Oxford*.

- Hall, Harry Reginald, *British Museum, W.C.*
Hall, Miss S. E., 12, *Belsize Square, N.W.*
Hallam, G. H., *The Park, Harrow-on-the-Hill.*
Halsbury, The Right Hon. the Earl of, 4, *Ennismore Gardens, S.W.*
† Hammond, H. E., *Trinity College, Cambridge.*
Hardie, Prof. W. Ross, *The University, Edinburgh.*
Harding, G. V., *The Firz, Upper Basildon, Pongbourne.*
Hardy, F. A., *Scol House, Kinnear Road, Edinburgh.*
Harper, Miss Barbara, *Queen's College, 43, Harley Street, W.*
Harris, H. B., 37, *Kensington Square, W.*
Harris, Prof. William Fenwick, 8, *Mercer Circle, Cambridge, Mass., U.S.A.*
† Harrison, Ernest, *Trinity College, Cambridge.*
Harrison, Miss J. E., LL.D., D.Litt. (Council), *Newnham College, Cambridge.*
Harrison, Miss L., *Elterey, Linnel Lane, Liverpool.*
Harrower, Prof. John, *The University, Aberdeen.*
Hart, J. H. A., *St. John's College, Cambridge.*
Hartley, Rev. R., *The Mount, Oxford.*
Hasluck, F. W., *British School, Athens, Greece.*
Hauser, Dr. Friedrich, *Piazza Sforza-Cesarini 41, Rome, Italy.*
Haussonllier, B., 8, *Rue Sainte-Cécile, Paris.*
† Haverfield, F. J., LL.D., *Christ Church, Oxford.*
Hawes, C. H., 10 *East 85th Street, New York, U.S.A.*
Hawes, Mrs. C. H., 10 *East 85th Street, New York, U.S.A.*
Hawes, Miss E. P., 13, *Sussex Gardens, W.*
† Hay, C. A., 127, *Harley Street, W.*
Hayter, Angelo G. K., 4, *Forest Rise, Walthamstow, Essex.*
Head, Barclay Vincent, D.C.L., D.Litt., 26 *Linster Square, W.*
Heal, John Alban, 66, *Cadogan Place, S.W.*
Headlam, Rev. A. C., D.D., *King's College, London.*
Headlam, J. W., c/o Mrs. Headlam, 1, *St. Mary's Road, Wimbledon.*
Headlam, W. G., *King's College, Cambridge.*
Heard, Rev. W. A., *Fettes College, Edinburgh.*
† Heathcote, W. E., *Cleevehurst, Stoke Poges, near Slough.*
Heberden, C. B., *Principal of Bruynow College, Oxford.*
Helbert, Lionel H., *West Downs, Winchester.*
Henderson, Arthur E., *The Laurels, Dulwich, S.E.*
Henderson, Bernard W., *Exeter College, Oxford.*
Henderson, Rev. P. A. Wright, D.D., *Warden of Wadham College, Oxford.*
Henn, Mrs., *The Vicarage, Bolton, Lancashire.*
Henry, Robert M.,
Henty, Mrs. Douglas, *Westgate, Chichester.*
Hereford, The Lord Bishop of, *The Palace, Hereford.*
† Hertz, Miss Henriette, *The Poplars, 29, Avenue Road, N.W.*
Hewitt, J. F., *Holton Cottage, Oxford.*
Heyer, G., *King's College School, Wimbledon, S.W.*
Hill, George F. (Council), *British Museum, W.C.*
Hill, Miss Mary V., *Sandecotes School, Parkstone, Dorset.*
Hillard, Rev. A. E., *St. Paul's School, West Kensington, W.*
Hirst, Miss Gertrude, *Rurwarp, Whitby, Yorks.*
Hodgkin, Thomas, D.C.L., Litt.D., *Barnoor Castle, Beal, Northumberland.*
Hodgson, F. C., *Abbotsford Villa, Twickenham.*
Hogarth, David G. (Council), *Chapel Meadow, Forest Row, Sussex.*
Hogarth, Miss M. I., *The Red House, Westleton, Suffolk.*
† Holborn, J. B. S., 42, *Dalebury Road, Upper Tooting, S.W.*
Holding, Miss Grace E., 9, *Beacon Hill, Camden Road, N.W.*
Holland, Miss Emily, *Pendurrel, Lansdowne Road, Wimbledon, S.E.*
Hopkinson, J. H., *Warden of Hulme Hall, Plymouth Grove, Manchester.*
Hoppin, J. C., *Courtlands, Pomfret Centre, Conn., U.S.A.*

- Hornby, Rev. J. J., D.D., *Provost of Eton College, Windsor.*
 +Hort, Sir Arthur F., Bart., *Garlands, Harrow-on-the-Hill.*
 Hose, H. F., *Dulwich College, Dulwich, S.E.*
 Hoste, Miss M. R., *St. Augustine's, Blackwater Road, Eastbourne.*
 House, H. H., *The College, Malvern.*
 How, W. W., *Merton College, Oxford.*
 Howard de Walden, The Right Hon. Lord, *Seaford House, Belgrave Square, S.W.*
 Howorth, Sir Henry H., K.C.I.E., F.R.S., 30, *Collingham Place, S.W.*
 Huddart, Rev. G. A. W., *Kirklington Rectory, Bedale, Yorks.*
 Huddleston, J. H., Ph.D., *The University of Maine, Orono, Maine, U.S.A.*
 Hügel, Baron Friedrich von, 13, *Vicarage Gate, Kensington, W.*
 Hunt, A. S., D.Litt. (Council), *Queen's College, Oxford.*
 Hutchinson, Sir J. T., Chief Justice of Ceylon, *Colombo, Ceylon.*
 Hutchinson, Miss W. M. L., *Moor Hurst, Tenison Avenue, Cambridge.*
 Hutton, Miss C. A., 49, *Drayton Gardens, S.W.*
 Hyslop, Rev. A. B. F., *Warden of Trinity College, Glenalmond, Perth, N.B.*
 In Thurn, J. H., 5, *Collingwood Gardens, S.W.*
 Jackson, Prof. Henry, Litt.D., *Trinity College, Cambridge.*
 Jackson, Mrs. F. H., 74, *Rutland Gate, S.W.*
 Jackson, T. W., 8, *Bradmore Road, Oxford.*
 Jackson, Rev. W. W., *Rector of Exeter College, Oxford.*
 *James, The Rev. H. A., D.D., *School House, Rugby.*
 James, H. R., *Bankipore, India.*
 James, Lionel, *St. Peter's College, Radley, Abingdon.*
 James, Montague Rhodes, Litt.D., *Provost of King's College, Cambridge.*
 Janvier, Mrs. Thomas A., c/o Brown, Shipley and Co., 123, *Pall Mall, S.W.*
 Jasonidy, D. John, *Blandel Street, Limassol, Cyprus.*
 Jeans, Rev. G. E., *Shorwell, Newport, Isle of Wight.*
 Jenkins, Miss Nora, *Thorwald, Loschwitz bei Dresden, Germany.*
 Jenkinson, F. J. H., *Trinity College, Cambridge.*
 Jenner, Miss Lucy A., 25, *Warwick Gardens, Kensington, W.*
 Jevons, F. B., D.Litt., *The Castle, Durham.*
 Jex-Blake, Miss, *Girton College, Cambridge.*
 Joachim, Miss M.
 Johnson, Miss Lorna, *Woodleigh, Altrincham.*
 Jonas, Maurice, 9, *Bedford Square, W.C.*
 +Jones, H. Stuart, *Glan-y-Mor, Saundersfoot, Pembrokeshire.*
 +Jones, Ronald P., 208, *Colchester Court, South Kensington.*
 Jones, W. H. S., *The Perse School, Cambridge.*
 Jones, William, 65, *High Street, Berwick-on-Tweed.*
 Joseph, H. W. B., *New College, Oxford.*
 Judge, Max, 7, *Pall Mall, S.W.*
 Karp, George, *Abadisches Kunstmuseum, Bonn am Rhein.*
 Keene, Prof. Charles H., *University Club, Dublin.*
 Keith, A. Berriedale, *Colonial Office, Downing Street, S.W.*
 Kelly, Charles Arthur, 30, *Cherue Walk, Chelsea, S.W.*
 Keltie, J. S., LL.D., 1, *St. John's Wood Park, N.W.*
 Kennedy, J., 12, *Frogna Lane, Finchley Road, N.W.*
 Kensington, Miss Frances, 145, *Gloucester Terrace, Hyde Park, W.*
 Kenyon, F. G., D.Litt. (Council), *British Museum, W.C.*
 Ker, Prof. W. P., 95, *Gower Street, W.C.*
 Kerr, Prof. Alexander, *Madison, Wisconsin, U.S.A.*
 Koser, Dr. J., *Colatal, Chemin Vieux, Lausanne.*
 Kottlewel, Rev. P. W. H., 1, *Albert Road, Clifton, Bristol.*
 Kieffer, Prof. John B., *College Avenue, Lancaster, Pa., U.S.A.*
 King, J. E., *Grammar School, Bedford.*
 King, Rev. Canon J. R., *St. Peter's Vicarage, Oxford.*
 +King, Mrs. Wilson, 19, *Highfold Road, Edgbaston, Birmingham.*

- Knowles, Sir James, K.C.V.O., *Queen Anne's Lodge, St. James' Park, S.W.*
 Köhler, Olivia C., 59, *Kingswood Avenue, Queen's Park, W.*
 Lane, Mrs. Charles T., *Dunrobin, Petersfield.*
 Lang, Andrew, LL.D., D.Litt., 1, *Marlora Road, Kensington, W.*
 *Lang, Sir R. Hamilton, K.C.M.G., *The Grove, Dedham, Essex.*
 Langdon-Davies, B. N., *Copthall, Burgh Heath, Surrey.*
 Langton, Neville, 20, *Bentinch Street, Cavendish Square, W.*
 †Lansdowne, The Most Hon. the Marquess of, K.G., G.C.S.I., G.C.I.E., G.C.M.G.,
Bonwood, Calne, Wilts.
 Lantour, Miss de, *Oak Leigh, Eastbourne.*
 La Touche, C. D., 53, *Raglan Road, Dublin.*
 Lawson, L. M., *University Club, Fifth Avenue and Fifty-fourth Street, New York, U.S.A.*
 Leaf, Herbert, *The Green, Marlborough.*
 †Leaf, Walter, Litt.D., D.Litt. (V.P.), 6, *Swiss Place, Regent's Park, N.W.*
 Lecky, Mrs., 38, *Onslow Gardens, S.W.*
 Leeper, Alexander, *Warden of Trinity College, Melbourne.*
 Lee-Warner, Miss Evelyn, *Leewood, Gillingham.*
 Legge, F., 6, *Gray's Inn Square, W.C.*
 Leigh, W. Austen, *Hartfield, Rehampton, S.W.*
 Lettis, T., Malcolm, 34, *Canonsbury Park South, N.*
 Lewis, Harry R., 5, *Argyll Road, Kensington, W.*
 Lewis, Miss M. B., 42, *Shrewsbury Road, Oxtou, Birkenhead.*
 †Lewis, Mrs. S. S., *Castle-brae, Chesterton Road, Cambridge.*
 Leicester, Mrs. Rafe, 6, *Cheyne Walk, S.W.*
 Lindley, Miss Julia, 74, *Shooter's Hill Road, Blackheath, S.E.*
 Lingen, Lady, 13, *Wetherby Gardens, S.W.*
 Lister, Hon. Reginald, *British Embassy, Paris.*
 LIVINGSTONE, R. W., *Christ Church, Oxford.*
 Lloyd, Miss A. M., *Caythorpe Hall, Grantham.*
 †Lock, Rev. W., D.D., *Warden of Keble College, Oxford.*
 †Loeb, James, 37, *East 38th Street, New York.*
 †Longman, Miss Mary, 27, *Norfolk Square, Hyde Park, W.*
 Lorimer, Miss H. L., *Somerville College, Oxford.*
 †Loring, William (Council), *Goldsmiths' College, New Cross, S.E.*
 Lucas, Bernard J., *Southdown, Bramber, Sussex.*
 Lumsden, Miss, 10, *St. Thomas Mansions, Westminster.*
 Lunn, Henry S., M.D., *Oldfield House, Harrow-on-the-Hill.*
 Lunn, W. Holdsworth, 5, *Endsleigh Gardens, N.W.*
 Lyttelton, Hon. and Rev. E., *Eton College, Windsor.*
 *Macan, R. W., *Master of University College, Oxford.*
 McArthur, A. G., 28, *Linden Gardens, W.*
 McClymont, Rev. J. A., D.D., 3, *Queen's Gardens, Aberdeen.*
 Macdonald, George, LL.D. (Council), 17, *Leamouth Gardens, Edinburgh.*
 Macdonald, Miss Louisa, *Women's College, Sydney University, Sydney, N.S.W.*
 Macdonell, W. R., LL.D., *Bridgefield, Bridge of Don, Aberdeenshire.*
 McDougall, Miss Eleanor, *Westfield College, Hampstead, N.W.*
 McDowall, Miss Katherine Ada, 166, *Holland Road, Kensington, W.*
 MacEwen, Rev. Prof. Alex. Robertson, 3, *Doane Terrace, Edinburgh.*
 McIntyre, P. S., *The University, St. Andrews.*
 MacIver, D. Randall, *Wolverton House, Clifton, Bristol.*
 McKerrrow, Miss, 7, *Barnes Street, Ayr, N.B.*
 Mackenzie, Lady, 53, *Adogon Square, S.W.*
 Mackenzie, Duncan, 18, *Via del Mascherino, Rome.*
 Mackenzie R. J., 12, *Great Stuart Street, Edinburgh.*
 MacLehose, James J., 61, *St. Vincent Street, Glasgow.*
 Macmillan, Mrs. Alexander, 32, *Grosvenor Road, S.W.*
 *Macmillan, George A., D.Litt. (Hon. Sec.), *St. Martin's Street, W.C.*
 Macmillan, Mrs. George A., 27, *Queen's Gate Gardens, S.W.*

- Macmillan, Maurice, 52, *Cadogan Place, S.W.*
 †Macmillan, W. E. F., 27, *Queen's Gate Gardens, S.W.*
 †Macnaghten, Hugh, *Eton College, Windsor*
 Macnaghten, The Right Hon. Lord, 198, *Queen's Gate, S.W.*
 †Magrath, Rev. J. R., *Provost of Queen's College, Oxford*
 *Mahaffy, Rev. J. P., D.D., D.C.L., C.V.O., *Trinity College, Dublin*
 Mair, Prof. A. W., *The University, Edinburgh*
 †Malin, F. B., *Marlborough College, Wilts*
 Mallet, P. W., 25, *Highbury New Park, N*
 Mattatt, Prof. Irving, *Brown University, Providence, R.I., U.S.A.*
 †Mavrodin, G. E. (Council), *Hammondswood, Frensham, Farnham*
 †Marquand, Prof. Allan, *Princeton College, New Jersey, U.S.A.*
 Marsh, E.
 Marshall, Miss, *For Cross, Wore, Newcastle, Shiffs*
 Marshall, Frederick (Council), *British Museum, W.C.*
 Marshall, John, *Lease House, Leices.*
 Marshall, J. H., *Benmore, Simla, India*
 Marshall, Prof. J. W., *University College of Wales, Aberystwyth*
 Marshall, R., 31, *The Waldrons, Croydon*
 Marshall, T., *Highfield Chapel, Allerton, Leeds*
 Martin, Charles B., *The College, Oberlin, Ohio, U.S.A.*
 †Martin, Sir R. B., Bart., 10, *Hill Street, Mayfair, W.*
 †Marryn, Edward, *Tillyra Castle, Ardara, County Galway*
 Maasy, Lieut.-Colonel P. H. H., *H.M.V. Consulate, Varna, Bulgaria*
 Mathieson, P. E., *New College, Oxford*
 Mavrogordato, J., 34, *Gloucester Gardens, Hyde Park, W.*
 Mavrogordato, J. M., 62, *Westbourne Terrace, Hyde Park, W.*
 Mavrogordato, Pandell A., 74, *Westbourne Terrace, Hyde Park, W.*
 Mayor, H. R., *Clifton College, Bristol*
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 Measures, A. E., *King Edward VI. School, Birmingham*
 Merk, F. H., *Christ's Hospital, West Herts*
 Merry, Rev. W. W., *Rector of Lincoln College, Oxford*
 MEYER, D., *Greek Legation, 1, Stanhope Gardens, S.W.*
 †Miers, Prof. H. A., F.R.S., *Magdalen College, Oxford*
 Michel, Prof. Ch., 42, *Avenue Blonden, Liège, Belgium*
 Miller, William, 2, *Via San Martino al Marone, Rome, Italy*
 Millet, P., 95, *Boulevard St. Michel, Paris*
 Millingen, Prof. Alexander van, *Robert College, Constantinople*
 Millington, Miss M. V., 47, *Peak Hill, Sydenham, S.E.*
 Milne, J. Grafton, *Dunroft, Linden Gardens, Leatherhead, Surrey*
 Müller, Viscount, G.C.B., *Brook's Club, St. James Street, S.W.*
 Minet, Miss Julia, 18, *Saxx Square, Hyde Park, W.*
 Minns, Ellis H., *Pembroke College, Cambridge*
 Minturn, Miss E. T., 14, *Chelsea Embankment, S.W.*
 Mitchell, Mrs. C. W., *Jermyn Towers, Newcastle-on-Tyne*
 Moline, Miss J. P., 172, *Church Street, Stoke Newington, N.*
 †Mond, Mrs. Frida, *The Poplars, 20, Avenue Road, Regent's Park, N.W.*
 Monson, Right Hon. Sir E. J., Bart., G.C.B., G.C.M.G., *Richmond Park*
 Morgan, Miss, 64, *Scarnate Villas, Kennington, W.*
 †Morshead, F. D. A., 29, *Trinity Square, Southwark, S.E.*
 Moss, The Rev. H. W., *The School House, Shrewsbury*
 Mount, Rev. L. B., 14, *Norham Road, Oxford*
 Moxon, Rev. F. Allen, 2, *Soho Square, W.*
 Mozley, H. W., *The White House, Haslemere*
 †Munro, J. A. R., *Lincoln College, Oxford*
 Murray, G. G. A. (Council), 131, *Banbury Road, Oxford*

- Minson, Miss Caroline, 29, *Beech Hill Road, Sheffield*.
 †Myers, Ernest (Council), *Brickenside, Chislehurst*.
 †Myres, J. Linton, *Christ Church, Oxford*.
 †Nairn, Rev. J. Arbuthnot, *Merchant Taylors' School, E.C.*
 Nash, Mrs. Vaughan, 42, *Well Walk, Hampstead*.
 Newman, W. L., Litt.D., D.Litt., *Pittville Lawn, Cheltenham*.
 Newton, The Lord, 6, *Belgrave Square, S.W.*
 Nichols, Morton C., *Metropolitan Club, Fifth Avenue, New York, U.S.A.*
 Noack, Prof. Ferdinand, *Feldstrasse 140, Kiel*.
 Northampton, The Most Hon. the Marquis of, 51, *Lennox Gardens, S.W.*
 Oakesmith, John, D.Litt.,
 Odgers, Rev. J. Edwin, D.D., 145, *Woodstock Road, Oxford*.
 Ogilvy, Miss Alison, 12, *Prince Edward's Mansions, Pembroke Square, W.*
 Oppé, A. P., *Board of Education, Whitehall, S.W.*
 Orpen, Rev. T. H., *Ivy Cottage, Little Shelford, Cambridge*.
 Osler, Prof. W., 13 *Norham Gardens, Oxford*.
 Owen, A. S., *Keele College, Oxford*.
 Owen, Rev. E. C. Everard, *The Knoll, Harrow-on-the-Hill*.
 Page, T. E., *Charterhouse, Godalming*.
 Pallis, Alexander, *Tatof, Aigburgh Drive, Liverpool*.
 Palmer, Rev. J., *Balliol College, Oxford*.
 Parker, Miss M. E., *Princess Helena College, Ealing, W.*
 †Parry, Rev. O. H., *Inglehope, Cranmer Road, Cambridge*.
 Parry, Rev. R. St. J., *Trinity College, Cambridge*.
 Paton, J. Lewis, *Grammar School, Manchester*.
 Paton, James Morton, *Cambridge, Mass., U.S.A.*
 Paton, W. R., *Maison Cumus, Place Marc, Viroflay, Seine-et-Oise, France*.
 Payne-Smith, Rev. W. H., *Moultrie Road, Rugby*.
 Pears, Edwin, 2, *Rue de la Banque, Constantinople*.
 Peckover, Alexander, LL.D., *Wisbech, Cambs.*
 †Peckover, Miss Alexandrina, *Bank House, Wisbech*.
 Peers, C. R., 7, *Grosvenor Road, S.W.*
 Peile, John, Litt.D., *Master of Christ's College, Cambridge*.
 Peile, Rev. J. F., *University College, Oxford*.
 Pelham, Hon. Mrs. Arthur, 15, *Duke Street, Manchester Square, W.*
 Pelham, Professor H. F. (V.P.), *President of Trinity College, Oxford*.
 Pember, E. H., K.C., *Vicar's Hill, near Lymington, Hants.*
 Penrose, Miss Emily (Council), *Royal Holloway College, Englefield Green, S.O. Surrey*.
 †Percival, F. W., 1, *Chesham Street, S.W.*
 Perkins, O. T., *Wellington College, Berks.*
 Verry, Prof. Edward Delavan, *Columbia University, New York City, U.S.A.*
 Pesel, Miss Laura, *Oak House, Bradford*.
 Petrocokino, Ambrose, *Thames Cottage, Pangbourne*.
 Phillips, Mrs. Herbert, *Sutton Oaks, Macclesfield*.
 Phillimore, Prof. J. S., *The University, Glasgow*.
 Philpot, Hamlet S., *The Country School, Baltimore, Maryland, U.S.A.*
 Picard, George, 2 bis, *Rue Bessacville, Paris*.
 Pipe, Miss Hannah E., *Limpfield, Surrey*.
 Pinckney, A. B., *The Orchard, Bathford, Somerset*.
 Plater, Rev. Charles S.J., *St. Mary's Hall, Stonyhurst, Blackburn*.
 †Platt, Prof. Arthur, 3, *Chester Terrace, N.W.*
 Pollard, A. T., 24, *Harley Street, W.*
 Pollock, Sir Frederick, Bart., 21, *Hyde Park Place, W.*
 †Pope, Mrs. G. H., 60, *Banbury Road, Oxford*.
 Pope, Rev. J. O. Fallon, S.J., *Pope's Hall, Oxford*.
 Porter, Mrs., 11, *West Cromwell Road, S.W.*
 †Ponigate, Prof. J. P., Litt.D., *Trinity College, Cambridge*.
 Powell, C. M., *Eastfield, Caversham, Reading*.

- Powell, Sir F. S., Bart., M.P., 1, *Cambridge Square, Hyde Park, W.*
 Powell, John U., *St. John's College, Oxford.*
 Poynter, Sir Edward J., Bart., Litt.D., D.C.L., P.R.A., 70, *Addison Road, S.W.*
 Preece, Sir William H., *Gothic Lodge, Wimbledon Common, S.W.*
 Pretor, A., 2, *Camden Place, Wyke, Weymouth.*
 Price, Miss Mabel, *Charlton, Houdington, Oxford.*
 Prickard, A. O., *Hollymount, Fleet R.S.O., Hants.*
 Proctor, Mrs. A., *The Lodge, Waltham Cross.*
 Prothero, Henry, 15, *Promenade, Cheltenham.*
 Pryor, Francis B., *Woodfield, Hatfield, Herts.*
 Pyddoke, Miss Mary, 6, *Templaton Place, Earls Court, S.W.*
 Quaritch, Miss, 34, *Belissa Grove, Hampstead, N.W.*
 Quibell, Mrs. Annie A., *Giza Museum, Egypt.*
 † Rackham, H., 4, *Grange Terrace, Cambridge.*
 Radcliffe, W. W., *Fonthill, East Grinstead, Sussex.*
 Raleigh, Sir Thomas, K.C.S.I., D.C.L., *All Souls College, Oxford.*
 † Raleigh, Miss Katherine A., 8, *Park Road, Uxbridge.*
 † Ralli, Pandeli, 17, *Belgrave Square, S.W.*
 † Ralli, Mrs. Stephen A., *St. Catherine's Lodge, Hove, Sussex.*
 Ramsay, A. B., *Eton College, Windsor.*
 Ramsay, Prof. G. G., LL.D., Litt.D., *Drumore, Blairgowrie, N.B.*
 † Ramsay, Prof. Sir W. M., D.C.L., Litt.D. (V.P.), *The University, Aberdeen.*
 Ransom, Miss C. L., *Bryn Mawr College, Bryn Mawr, Penna, U.S.A.*
 Rawlins, F. H., *Eton College, Windsor.*
 Rawnsley, W. F., *The Manor House, Shamley Green, Guildford.*
 Reade, Essex F.
 Reece, Miss Dora, 26, *Bullingham Mansion, Pitt Street, Kensington, W.*
 Reid, Mrs. C. M., *Langham Hotel, Portland Place, W.*
 Reid, Prof. J. S., Litt.D., *Caius College, Cambridge.*
 † Reinach, Salomon, 31, *Rue de Berlin, Paris.*
 † Rendall, Rev. G. H., Litt.D., *Charterhouse, Godalming.*
 † Rendall, Montague, *The College, Winchester.*
 Rennie, W., *The University, Glasgow.*
 Richards, Miss A. G. M., 23, *Corbett Road, Cardiff.*
 Richards, Rev. G. C. (Council), *Oriel College, Oxford.*
 Richards, F., *Kingswood School, Bath.*
 Richards, H. P., *Wadham College, Oxford.*
 Richmond, O. L., 64, *Cornwall Gardens, S.W.*
 Richmond, Sir W. B., K.C.B., D.C.L., R.A., *Bevor Lodge, West End, Hammer-smith, W.*
 Rider, Miss B. C., 23, *Merce's Road, Tufnell Park, N.* 6, *Rue de la Sorbonne, Paris*
 (till June 1907).
 Ridgeway, Prof. W. (Council), *Fen Ditton, Cambridge.*
 Ridley, Sir Edward, 48, *Lunnox Gardens, S.W.*
 Rigg, Herbert A., 13, *Queen's Gate Place, S.W.*
 Riley, W. E., *County Hall, Spring Gardens, S.W.*
 Robb, Mrs., 46, *Rutland Gate, S.W.*
 Roberts, Rev. E. S., *Master of Caius College, Cambridge.*
 Roberts, J. Slingsby, 3, *Powis Villas, Brighton.*
 Roberts, Principal T. F., *Shorborne House, Aberystwyth.*
 Roberts, Professor W. Rhys, *The University, Leeds.*
 Robinson, Charles Newton, 11, *John Street, Mayfair, W.*
 Robinson, Edward, *Metropolitan Museum of Art, New York, U.S.A.*
 Robinson, G. G., *Reschroft, Pevensey Road, St. Leonards-on-Sea.*
 Robinson, T. P. G., *Ashfield, Rothsay Place, Bedford.*
 Robinson, W. S., *Courtfield, West Hill, Putney Heath.*
 Rockwell, Miss Eliz. H., *Winsted, Conn., U.S.A.*
 Rodd, Sir Rennell, K.C.M.G., 17, *Stratford Place, W.*
 Rogers, Benjamin Bickley, *Eastwood, Strawberry Hill, Twickenham.*
 Rome, W., *Creeches Place, Burnham-on-Crouch.*

- †Rosebery, The Right Hon. the Earl of, K.G., 38, *Dorchester Square, W.*
 Rosenörn-Lehn, The Baroness, *Palazzo Bindungoli, Assisi, Italy.*
 Ross, W. D., *Orisl College, Oxford.*
 Rotton, Sir J. F., *Lockwood, Frith Hill, Godalming, Surrey.*
 Roms, Lieut.-Colonel, *Worstead House, Norwich.*
 *Rouse, W. H. D., Litt.D., 16, *Brookside, Cambridge.*
 Roudledge, Miss, *Little Colstrop, Hambleden, Henley-on-Thames.*
 Rowland-Brown, H., Jun., *Ozhey Grove, Harrow-Wield.*
 Ruben, Paul, *Headington, Oxford.*
 Rabie, Rev. Alfred E., *The Royal Naval School, Eltham, S.E.*
 Rücker, Miss S. C., 4, *Vanbrugh Terrace, Blackheath, S.E.*
 Rücker, Principal Sir A. W., D.Sc., F.R.S., 10, *Glethow Gardens, S. Kensington, S.W.*
 Runtz, Ernest, 11, *Wallbrook, E.C.*
 Rustafnell, R. de, 1, *Down Street, Piccadilly, W.*
 Rutherford, Rev. W. Gunion, LL.D., *Little Hallands, Bishopston, Lewis.*
 Sachs, Mrs. Gustave, 26, *Marlborough Hill, N.W.*
 Salisbury, F. S., *Hulme Grammar School, Manchester.*
 Sampson, C. H., *Braznoss College, Oxford.*
 Samuel, Miss Edith Sylvester, 80, *Onslow Gardens, S.W.*
 Sanborn, F. B., *Concord, Mass., U.S.A.*
 Sanderson, F. W., *The School, Oundle, Northamptonshire.*
 †Sandys, J. E., Litt.D. (V.P.), *Merton House, Cambridge.*
 †Sandys, Mrs., *Merton House, Cambridge.*
 Sargent, H. J., 12 *St. James's Square, S.W.*
 Sawyer, Rev. H. A. P., *School House, St. Bees, Cumberland.*
 *Sayce, Rev. Prof. A. H., LL.D. (V.P.), 8, *Chalmers Crescent, Edinburgh.*
 †Scaramanga, A. P., 18, *Barkston Gardens, Kensington, S.W.*
 Scholderer, J. V., *British Museum, W.C.*
 Schrader, Prof. H., *Universität, Innsbruck, Tyrol.*
 Schultz, R. Weir, 6, *Manneville Place, W.*
 Schuster, Ernest, 12, *Harrington Gardens, S.W.*
 Scouloudi, Stephanos, *Athens, Greece.*
 Scull, Miss Sarah A., *Smethport, McKean Co., Pa., U.S.A.*
 Seager, Richard B., 10 *Baring Bros. and Co., 8, Bishopsgate Street Within, E.C.*
 Seale, Rev. E. G., *School House, Highgate, N.*
 Secker, W. H., *Chapelthorpe Hall, Wakefield.*
 Seeborn, Hugh, *Poynder's End, near Hitchin.*
 Seltman, E. J., *Kinghoe, Great Berkhamsted, Herts.*
 †Selwyn, Rev. E. C., D.D., *School House, Uppingham.*
 Shadwell, C. L., D.C.L., *Provost of Orisl College, Oxford.*
 Sharpe, Miss Catharine, *Stoneycroft, Elstree, Herts.*
 Shawyer, J. A., *Clifton College, Bristol.*
 Sheppard, J. T., *King's College, Cambridge.*
 Sherwell, John W., *Saddlers Hall, Champside, E.C.*
 Shewan, Alexander, *Seehol, St. Andrews, Fife.*
 Shipley, H. S., *St. Helen's Cottage, Coalville, Leicester.*
 Shove, Miss E., 25, *St. Mark's Crescent, Regent's Park, N.W.*
 Sidgwick, Arthur, *Corpus Christi College, Oxford.*
 Sikes, Edward Ernest (Council), *St. John's College, Cambridge.*
 Silcock, Miss, *High School for Girls, West Dulwich, S.E.*
 Silla, H. H., *Bourton, West Road, Cambridge.*
 Simpson, Percy, *St. Olave's Grammar School, Tower Bridge, S.E.*
 Simpson, Professor, 3, *Brunswick Place, Regent's Park, N.W.*
 †Sing, J. M., S. *Edward's School, Oxford.*
 *Skirne, Rev. J. H., *Itchen Stoke Rectory, Alresford, Hants.*
 Slater, E. V., *Eton College, Windsor.*
 Slater, Howard, 10, *The Crescent, Plymouth.*
 Sloane, Miss Eleanor, 13, *Welford Road, Leicester.*

- † Smith, A. Hamilton (Council), 22, *Endsleigh Street, W.C.*
 Smith, A. L. F., *All Souls College, Oxford.*
 Smith, Cecil, LL.D. (V.P.), 18, *Earl's Terrace, Kensington, W.*
 † Smith, Prof. Goldwin, *The Grange, Toronto, Canada.*
 Smith, H. A., *Hazelwood, The Park, Cheltenham.*
 Smith, H. Babington, C.B., C.S.I., 29, *Hyde Park Gate, S.W.*
 Smith, Nowell, *Southgate Corner, Winchester.*
 Smith, R. Elsey, *Rosegarth, Walden Road, Horsell, Woking.*
 Smith, Reginald J., K.C., 11, *Hyde Park Street, W.*
 Smith-Pearse, Rev. T. N. H., *The College, Epsom.*
 † Snow, T. C., *St. John's College, Oxford.*
 † Somerset, Arthur, *Castle Goring, Worthing.*
 Sonnenschein, Prof. E. A., 7, *Darnley Road, Birmingham.*
 Souter, Prof. Alex., 24, *Chalfont Road, Oxford.*
 Sowels, F., *The Rectory, Thetford, Norfolk.*
 Spiers, R. Phené, 21, *Bernard Street, Russell Square, W.C.*
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 Annual of the British School at Athens.
 Archiv für Religionswissenschaft (B. G. Teubner, *Leipzig*).
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 Bulletin de Correspondance Hellénique (published by the French School at Athens).
 Bullettino della Commissione Archeologica Comunale di Roma (Prof. Gatti, Museo Capitolino, *Rome*).
 Byzantinische Zeitschrift (Prof. Dr. K. Krumbacher, *Amalienstrasse 77, München, Germany*).
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 Journal of the Royal Institute of British Architects, 9, *Conduit Street, W.*
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 Praktika of the Athenian Archaeological Society, *Athens*.
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 Rheinisches Museum für Philologie (Professor Dr. F. Bucheler, *Schumannstrasse, Bonn-am-Rhein, Germany*).
 Transactions of the Cambridge Philological Society and Journal of Philology.
 Wochenschrift für klassische Philologie.

SESSION 1905-6.

THE First General Meeting of the Society was held on November 7th, when Mr. S. H. Butcher took the chair. Professor E. A. Gardner read a paper on the Tegean pediments with particular reference to the figure of Atalanta, which appears in this volume.

Mr. G. F. Hill read a note on a bronze coin of Asine, in Messenia, representing the head of Apollo and the figure of his son Dryops, the eponymous hero of the Dryopians. The Asinaeans were particularly proud of their Dryopian descent: besides their temple of Apollo, they had, Pausanias tells us, a shrine and an ancient agalma of Dryops. On the coin the hero is represented enthroned, holding a kantharos; the type is obviously copied from an archaic relief similar to the 'ancestor-reliefs,' which are almost entirely of Laconian origin. The existence, proved by this coin, of a Laconian style of relief on this Messenian site is interesting in view of the historical relations between Asine and Sparta. The Asinaeans, while still inhabiting Asine, in Argolis, had given assistance to Sparta against Argos; expelled from their home by the Argives, they received the Messenian site from the Spartans. The paper was discussed by Professor P. Gardner, Mr. A. H. Smith, and Professor E. Gardner.

The Second General Meeting of the Society was originally fixed for December 12th, but was adjourned on that occasion as a mark of respect to the late President, Sir Richard Jebb, whose death had occurred a few days before. The meeting was ultimately held on January 16th, when the chair was taken by Professor Percy Gardner, the newly elected President of the Society, who delivered an address to the memory of his predecessor, Sir Richard Jebb. Professor W. C. F. Anderson then read a paper on Greek and Roman ships with multiple banks of oars. The problem of the arrangement of oars in the Greek warship is old, and was first discussed in the sixteenth century. Practical seamen held that the warships of the ancients were similar to those of their own day—a view which was never accepted by scholars. For the last two centuries it has been generally agreed that Scaliger and Palmerius had proved that the banks or benches were superposed, giving horizontal rows of oars. There has, however, been much difference of opinion as to the way in which this was done. Mr. Tarn's attempt to revive Bayfield's theory that the thranite, zugite, and thalamite were squads rowing in the stern, in the middle, and the bows is not justified.

by the passages he quotes, and can only succeed if we admit that *ἄνω* means 'aft,' and *κάτω*, 'forward.' Similarly his explanation of *ἑξέπορος* and *τρίπορος* as referring to these squads is not borne out by their use in classical authors. The literary evidence, both Greek and Latin, cannot be reconciled with the theory that the oars were all on the same level. The monumental evidence is also equally clear, although few representations shew more than two banks. The linguistic evidence is also strong, as the terms 'thranite,' &c., have a natural meaning if the banks are superposed. Further, the Byzantine dromos had two rows of banks, one above the other; and the Venetian galley, with several oars to one port, was an attempt to secure a lower freeboard without loss of power. The sixteenth century galley, with long sweeps and five to seven men pulling each, was intended to provide a gun platform. It was not a new invention, but merely the conversion of a lighter or barge into a warship, as the additional weight made the use of short oars less effective. The objections to the accepted theory have always been the length of oars in the upper banks; but the use of long oars on vessels with a high freeboard was shown in the tapestry in the old House of Lords, where two Spanish men-of-war were depicted using sweeps from their upper deck. Even in the fifties of last century 10-gun brigs, such as Darwin's Beagle, were aided by sweeps when chasing slavers. A parallel to Greek and Roman ships is to be found in Burmese vessels, which are very like them in structure, and represent about the same stage of development. The paper was illustrated, and a photograph of the Cataphract on the Ulubad relief was shown for the first time.

In the discussion which followed Mr. S. H. Butcher, Mr. Cecil Smith, Dr. Edmond Warre, and Mr. A. B. Cook took part. Mr. Cook showed a model (built by Messrs. Swan, Hunter and Richardson) of part of an ancient trireme in elucidation of his views.

At the Third General Meeting held on February 20th, Mr. E. Norman Gardiner read a paper on Heracles the Pancratiast, the substance of which appears in this volume.

At the Fourth General Meeting, held on May 8th, Professor Percy Gardner took the chair, when Mr. Cecil Smith, Keeper of the Department of Greek and Roman Antiquities in the British Museum, gave the first of his promised annual accounts of acquisitions in his department. He had arranged that acquisitions should be on view in a separate case at the Museum for a year before their incorporation in the collections, and this departure was to be supplemented by an annual *résumé* to be given at a meeting of the Hellenic Society. The main difficulty with which his department, in common with others, had to contend, was the inadequate grant at their disposal for making purchases. Despite the increase in the market price of antiquities, the funds at the disposal of the authorities were decidedly less than was the case twenty years ago. The present account comprised the more important acquisitions since his appointment in 1903.

Among the more striking objects shown upon the screen were the following : (1) On a polychrome Attic vase was a unique representation of the mystic marriage of Dionysus with the wife of the Archon Basileus. This rite was celebrated annually in the spring at Athens, at the festival of the Anthesteria, and was doubtless intended partly to symbolise, and partly, by a sort of sympathetic magic, to secure, the fertility of the city for the coming year. (2) The lesser arts of the goldsmith and jeweller were admirably illustrated by two fine intaglios representing a girl dancing an Eros upon her foot, and a female figure seated upon the prow of a trireme. Both these works of art belonged to an earlier period than analogous types previously known. A cloisonné ring showed the façade of the temple of Aphrodite at Paphos, as depicted on coins from that site ; and this section was supplemented by an exquisite specimen of Greek gold granulated toreutic work, rivalling the famous pieces of the Hermitage Museum from the Crimea. (3) Among the terracottas, in addition to choice specimens of the so-called Tanagra and Myrina figurines, special interest was aroused in the complete contents of a maiden's tomb, comprising a seated figure of a girl with detachable arms, nude, but probably intended to be draped with miniature garments ; the marriage vase ; the *ἐπιματτωρ* for carding wool ; and other feminine attributes, all executed on a proportionate scale in terra-cotta. (4) Of bronzes, the most remarkable were several fine examples recently exhibited at the Burlington Fine Arts collection, including the Forman equestrian figure ; an apo represented as a quail-catcher, holding a quail basket such as is used to-day and a lantern ; a Graeco-Egyptian statuette from Spain, one of a series of figurines belonging to that Graeco-Celt-Iberian art of which the finest development is seen in the much-discussed Elche head in the Louvre ; and the magnificent relief from Paramythia from the Hawkins collection, to the purchase of which Mrs. Hawkins had generously contributed, besides presenting works of an analogous character. (5) Architecturally the most conspicuous addition to the collections were the columns from the "Treasury of Atreus" at Mycenae, large portions of which had been recently presented by the Marquis of Sligo. With these, and with the help of casts of the hitherto known fragments in London, Athens, and Karlsruhe, a complete restoration of these remarkable columns and their capitals in their original form has now been erected in the Archaic Room of the Museum.—In view of the nature of Mr. Cecil Smith's paper no discussion followed, the Society, through the Chairman, expressing its appreciation of the communication made to them, and of the debt all students of ancient art owed to the department he represented.

The Fifth General Meeting was held on May 29th, when Mr. Horace Sandars read a paper descriptive of a collection of pre-Roman bronze votive objects from Despeñaperros, in Spain, Prof. Lewis Campbell occupying the chair. The collection was on view, and, with its affinities, was also illustrated by lantern-slides. The objects comprised representations of the human figure, in many instances of purely perfunctory workmanship, while

in others the details were carefully elaborated; some equestrian statuettes of considerable artistic merit; portions of the human body dedicated—in accordance with a usage with which we are familiar in classical, mediæval, and modern times—as thank-offerings for recovery from sickness; and, probably to be taken in connexion with these, a set of votive surgical instruments. The ethnological bearing of these objects was interesting. The influence of Greece had reached primitive Spain by two routes—southwards from Massilia, and northwards, by the so-called Phœnician trade-routes, from Gades. To a local school of art, modified by one or both of these channels, and suited to what was then, as now, a mining population, these bronze ex-votos should be attributed. But apart from their intrinsic interest and their ethnological bearing, the collection from Despeñaperros threw light on a work of first importance—the remarkable head found at Elche, the Iberian city of Ilici, now in the Louvre. This head, from the extraordinary elaboration of the *coiffure*, with its huge ear-disks and profusion of necklaces dependent from it, produces a quite unfamiliar impression on the student of Greek art on Greek soil. But its unhesitating acceptance by the Louvre authorities and by the savants who have done most work in the field of early Iberian art—MM. Pierre Paris and Heuzey may be cited—has received fresh confirmation by the little figures from Despeñaperros. These, which are themselves of undoubted antiquity, unquestionably reproduce, when due allowance has been made for the difference of material and an altogether lower standard of execution, the details in the Louvre marble which have hitherto been regarded as unique. In the subsequent discussion the Chairman and Mr. Cecil Smith took part. The latter considered it doubtful whether the influence on Western Europe generally called Phœnician might not really be more directly Ionian. He congratulated Mr. Sandars on the side-light he had been able to throw on the Paris head, though the genuineness of that work had never been, in his judgment, matter of doubt.

The Annual General Meeting was held at Burlington House on June 25th, Prof. Percy Gardner taking the chair. The Hon. Secretary (Mr. George Macmillan) read the following report on behalf of the Council:—

In the forefront of their Report the Council wish to place on record their sense of the loss the Society has sustained by the death of their honoured President, Sir Richard Claverhouse Jebb. His unique position in the world of letters, the grace of style and clearness of vision which lent persuasion to his public utterances, his championship in political life of the cause of literæ humaniores, his considered but generous affection for Greece and the Greeks of to-day, gave a peculiar appropriateness and dignity to his tenure of the Presidency of the Society for the Promotion of Hellenic Studies. The Council nominated Professor Percy Gardner, one of the Vice-Presidents, to fill the office

of President until the Annual Meeting, and they will to-day submit his name for election as President for the term of five years.

In November last His Majesty King George of Greece paid his first state visit to this country, and graciously received an address of welcome drawn up by the late President on behalf of the Council of the Society and of the Committee of the School at Athens conjointly. It should also be recorded that H.R.H. the Crown Prince of Greece has consented to fill the vacancy on the list of the Society's honorary members.

An important departure in the constitution of the Society, the creation of a class to be known as Student Associates, is now recommended by the Council for adoption. They have long felt that there was a class of younger students, specially interested in the objects of the Society, and likely, by inclination and training, to be useful members, who were debarred by the entrance fee from coming forward as candidates. They have endeavoured to devise a scheme which should confer a boon on the class in question, and inflict no injustice on those who have already assumed the full responsibilities of membership. This could only be done by giving part privilege for a part payment, and in the scheme now produced they believe that this intention is achieved in the fairest manner possible to the largest number. They regret that there will always remain individuals and classes for whom it is not possible to provide in this manner, but they believe that the scheme now laid down will, on a fair trial, prove a benefit to the class in question and to the Society at large.

Another suggested modification in the rules, of which notice has been sent to members, is that the office of President be in future tenable for five years only. A resolution to this effect will be submitted to-day.

In the past session the Society has held more than its usual number of meetings. On November 7th Professor Ernest Gardner read a paper on the *Atalanta of Tegea*, and Mr. G. E. Hill communicated a note on *Dryops, the Hero of Asine*. On January 16th Professor Percy Gardner, as President of the Society, delivered a short address in honour of the late President, and Professor W. C. F. Anderson read a paper on *Greek and Roman Ships with multiple banks of oars*, embodying a criticism of Mr. W. W. Tarn's paper of the previous session. On February 20th Mr. E. N. Gardiner gave the results of his further research in the sphere of Greek athletics in a paper entitled *Heracles the Pancratiast*. On May 8th Mr. Cecil Smith spoke on the *Recent Acquisitions in the Department of Greek and Roman Antiquities in the British Museum*. His paper covered the principal acquisitions in his department since his appointment in 1904, but it is hoped that this *résumé* may now become an annual event in the Society's Agenda. This striking illustration of the good relations between the Society and the Museum, which Mr. Cecil Smith emphasised in his speech at the Commemorative Meeting of 1904, will certainly be highly appreciated by members, and his valuable communications should also tend to the

development of the intelligent study of the treasures of our national museum.

On May 29th Mr. Horace Sandars kindly exhibited his collection of *Pre-Roman votive bronzes from Despeñaperros in Spain*, including in his paper some valuable evidence for the authenticity of the Elche bust in the Louvre.

The annual grants of £100 to the School at Athens, and of £25 to the School at Rome, have been renewed for a further period of three years. The School at Athens has now transferred its operations from Crete to Laconia, and Mr. Bosanquet is to be congratulated on the success which has already attended the excavations on the site of ancient Sparta. The Council wish to take this opportunity of offering their good wishes to Mr. R. M. Dawkins, who succeeds Mr. Bosanquet at Athens, and to Dr. Thomas Ashby, who has been recently elected Director by the Managing Committee of the School at Rome.

The Library.

The urgent question of space in the Society's Library at Albemarle Street has been met for the present by fitting with bookshelves the smaller room, the acquisition of which was reported last year. The accommodation for readers in the Library proper is sensibly improved, and it has been possible to maintain the subject order of the books upon the shelves. The promised subject catalogue of the sixty-six bound volumes of tracts is now in use in the Library, and in it are incorporated the detailed contents of some twenty other volumes of *opuscula* and *in honorem* works. By this means a quantity of valuable material, not otherwise easily accessible, is conveniently placed at the disposal of readers in the Library.

The records show that 372 visits were paid to the Library in the course of the year, as against 375 for the year 1904-5, and 338 for the year 1903-4. In addition to the books consulted in the Library, 415 volumes were borrowed, the figures for the preceding years being 401 and 312.

124 works (162 volumes) and 164 pamphlets have been added to the Library. The total accessions for 1904-5 were 122 in number. Owing to the unusual expenditure of last year the Council found it necessary to reduce its normal grant for the Library from £75 to £65, but fortunately the deficit was made good by a special donation of £10. Members are reminded that it is always within their power to further any department of the Society's work in which they are specially interested by donations of this kind. Among accessions of interest are—*The Archaeological Survey of India* (20 volumes), presented by the Secretary of State for India; the large publication *Aegina, das Heiligtum der Aphaia*, by Furtwängler, Fiechter, and Thiersch; and Duruy's *History of Greece* (eight volumes).

The Council desire to express their thanks to H.M. Government, the Authorities of the University Presses at Oxford and Cambridge, the Trustees of the British Museum, the Trustees of the Hunterian Collection in the University of Glasgow, the Archaeological Institute of America, the University of California, and the Committee of the Archaeological Society of Athens, for valuable donations of books.

The following authors have presented copies of their works:—M. A. S. Arbanitopoulos, Professor Baldwin Brown, Mrs. E. Burton Brown, M. P. Champault, Mr. B. F. Fletcher, Rev. A. B. Grimaldi, Mr. J. R. Harris, Prof. Fr. Hauser, Mr. G. F. Hill, Mr. D. G. Hogarth, Mr. George Macdonald, Signor P. Orsi, Rev. J. B. Pearson, Herr R. Pohl, Herr J. Poppelreuter, Mr. C. S. Reid, Mr. R. Phené Spiers, and Professor U. von Wilamowitz-Möllendorff. Miscellaneous gifts of books have been received from Mr. A. E. Bernays, Sir John Evans, Mr. F. W. Hasluck, Mr. George Macmillan, Mr. H. B. Walters, and the Librarian. The following publishers have presented recent works:—Messrs. Appleton, Bertelsmann, Black, Colin, Dent, Duckworth, Gerland, Macmillan, Murray, Seeman, Sonnenschein, Steup, Unwin, and Weidmann.

The Collection of Negatives, Slides, and Photographs.

Since the time of the reconstruction of the Collection three years ago, the figures showing the work done in this department are as follows:—Sale of slides (1903-4) 512, (1904-5) 787, (1905-6) 1,247; sale of photographs for the same three years, 465, 366, 670; slides hired, 1,224, 3,053, and 2,941.

The statistics in this department show that it has fulfilled expectations by becoming a real and permanent part of the work of the Society. The expenses of maintenance and development are considerable, and it has been thought best to use any profits arising from sales or hire in extending and improving the materials now at the disposal of members. With the aid of a member of the Council, the Librarian has been able to make good progress with the series of slides on Greek Epigraphy. These will be catalogued in the second supplement, which is to appear in the next part of the JOURNAL.

The thanks of the Society are due to the following for donations or promises of negatives or prints:—Mr. H. D. Acland, Miss F. Awdry, Miss Bickersteth, Mr. Adam Brown, Dr. R. Caton, Mr. W. Catchpole, Mr. J. Christie, Rev. W. Compton, Miss Dalmahoy, Mr. G. A. Floyd, Mr. F. W. Hasluck, Mr. G. F. Hill, Mr. J. H. Hopkinson, Miss Hoste, Mr. C. R. A. Howden, Mr. L. James, Miss Lloyd, Mr. A. L. Pearce-Gould, Mr. Hugh M. Raven, Mr. S. G. Squire, Mr. P. A. Thomas, and the Librarian.

Special acknowledgment is due to the Argonaut Camera Club for their

kind co-operation in furthering the Society's work in this direction. It is believed that similar help will be forthcoming from members of Professor Ernest Gardner's party which visited Greek lands in the spring.

Finance.

An examination of the Statement of Accounts for the Session will show a more satisfactory position than was the case in the Report for the preceding year. Instead of a deficit on the year's working, the Council is able to report a surplus of Income over Expenditure of £172, after writing off for depreciation the sum of £87 on the stocks of *Excavations at Phylakopi* and the *Facsimile of the Codex Venetus of Aristophanes*. This improvement is partly accounted for by the fact that the cost of reprinting Vol. XXII of the JOURNAL, and of printing and distributing *The History of the Society*, made the expenses of the 1904-5 Session exceptionally heavy; and partly that, owing to the temporary suspension of the excavations at Cnossus, the grant of £100 to the Cretan Exploration Fund has not been called for this year. The cost of the two Parts of the JOURNAL is also considerably less than last year, £526 against £618. In addition to this, a saving has been effected on the cost of printing the JOURNAL and of its carriage to Members, while it is also satisfactory to note that the sales have produced £30 more than last year, mainly owing to the demand for back Volumes. The sales of the volume on Phylakopi, though not so large as last year, have produced nearly £28. The account for the Aristophanes Facsimile is less satisfactory, only three copies having been disposed of—two in America and one in England. The Lantern Slides Account shows that this department may be regarded as at least self-supporting, the figures showing a profit of £15 on the year's working.

The appeal on behalf of the Endowment Fund has resulted in the receipt of £305 10s., to which has been added the bequest of £200 from the late Canon Adam Farrar received during the year. This, it should be noted, is the first legacy the Society has received, but the Council hope that, as time goes on, the generous precedent now set may be followed by other Members. They have invested £500 of this amount in the purchase of Calgary & Edmonton 4% Debentures, the interest on which will increase the Society's income from investments by about £18 annually. The Council hope that donations to this Fund from time to time will be made so that the above sum may be considerably augmented and permanently assist the work of the Society. It has already been suggested that special Donations to the Library, or to any other department of the Society's work, will always be welcome and will be turned to good account. A list of Subscribers to the Endowment Fund will be included in the second part of the JOURNAL for the current Year.

The Balance Sheet shows a present surplus of Assets over Liabilities of £172. The debts payable, which include all outstanding Liabilities to the end of the present financial year, stand at £293, a reduction of £105 on the amount at the corresponding period last year. The Cash in Hand at the present time (including £200 on Deposit Account at the Bank) amounts to £376 as against £200 last year. No estimate for the arrears of Subscriptions has been included in the Accounts owing to the uncertain nature of the probable receipts. This amount stands on May 31st at £136.

Conclusion.

Reference has been made above to the loss the Society has sustained in the death of its President, Sir Richard Jebb. Among others lost by death during the year special mention should be made of the late Provost of Oriel, Dr. D. B. Monro, one of the oldest and most active of our Vice-Presidents, of Professor A. S. Wilkins, who had served on the Council; of Mr. G. L. Craik, who had filled the office of Auditor for some years; of the Earl of Morley, one of the fast decreasing band of original members; of Lord Lingen, Sir M. E. Grant Duff, Sir Clinton Dawkins, Mr. A. E. Haigh, Sir C. A. Cookson, Mr. Octavius Valieri, and Mr. J. A. Sharkey.

During the year 42 new members have been elected and 24 have been lost by death or resignation. The number of members at present on the list is 931, and there are in addition 170 subscribing Libraries and 40 honorary members.

On the whole the Society may look back on a successful year. Its financial position has been strengthened, and considering the increase in the entrance fee the number of accessions has been satisfactory. The Council trust that in the coming year every effort will be made by members to bring in new candidates in order that the Society may be in a position to meet the increasing claims made upon its resources for the promotion of Hellenic research in every department.

The Chairman then delivered an address, summarising the progress of archaeological research for the previous twelve months. Having alluded to the losses the Society had sustained during the year by death, he selected two or three points in the year's work for special note. Among these were the excavations at Sparta conducted by the British School at Athens, and the reconstruction and restoration of ancient buildings in Greece, notably of the Erechtheion at Athens. In the sphere of publication the most important work that had appeared was the monumental book on the temple of Aphaia at Aegina by Prof. Furtwängler and his colleagues, Dr. Fiechter and Dr. Thiersch. The waste products of the earlier excavations had been made use of, and, by the combination of the newly found fragments with those already at Munich, an entirely novel arrangement of the pedimental sculptures had been attained. In this the stiff and mechanical

balance of figure against figure had been replaced by fighting groups on either side of the central figure of Athena. From this it would seem that the rigid symmetry, which for a century has passed for an essential characteristic of Aeginetan art, is due rather to Cockerell and Thorwaldsen than to the school of Onatas.

The Chairman concluded by moving the adoption of the Report, which was seconded by Mr. E. Pears and carried unanimously.

The Hon. Secretary (Mr. George Macmillan) proposed 'that the President of the Society be elected for a term of five years and be not immediately eligible for re-election.' The motion was seconded by Dr. Kenyon and carried unanimously.

Prof. Ernest Gardner proposed that the Council be authorised to admit to certain privileges of the Society without payment of entrance fee a class to be known as Student Associates. The Rev. G. C. Richards seconded the motion, which was carried unanimously.

Mr. Cecil Smith then gave an illustrated communication on the arrangement of the Parthenon pediments. The so-called Victory of the eastern pediment should now be transferred to the western, as recently discovered documentary evidence proved that this torso was found at the western end of the Parthenon, and the figure appears in Carrey's drawings of the western gable. If, as seems likely, she is there to be identified as Eris, the pediments would be left without any representation of attendant Victories—a most unlikely contingency, whether we consider the place which Victory took in Greek mythology, or the tendency of the Greek artist to make his composition clear by the introduction of subsidiary figures like these, or the analogies supplied by painters of contemporary vases. Mr. Cecil Smith considered that the small figures of Victory did once exist in both the pediments. In the eastern gable a Victory would fill the empty apex admirably; in the western she might appear to emerge from the sacred olive, which would give her the necessary support.

The officers and members of Council as nominated were then declared unanimously elected or re-elected. Mr. E. Norman Gardiner and Mr. F. Marshall were elected to vacancies on the Council. In declaring the ballot Prof. Gardner acknowledged the honour conferred upon him by his election as President of the Society.

The proceedings terminated with a vote of thanks to the auditors, Sir F. Pollock and Mr. A. J. Butler, moved by Mr. L. Dyer and carried unanimously.

A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:—

ANALYSIS OF RECEIPTS FOR THE YEARS ENDING :—

	31 May, 1897.	31 May, 1898.	31 May, 1899.	31 May, 1900.	31 May, 1901.	31 May, 1902.	31 May, 1903.	31 May, 1904.	31 May, 1905.	31 May, 1906.
	£	£	£	£	£	£	£	£	£	£
Subscriptions, Current.....	617	613	598	654	636	628	646	672	709	789
Arrears.....	4	13	18	9	10	13	13	205	76	90
Life Compositions.....	15	—	32	63	78	78	94	136	94	94
Libraries.....	126	115	122	163	179	185	202	147	154	168
Entrance Fees.....	—	—	—	33	45	57	50	100	132	103
Dividends.....	43	43	43	43	42	42	42	42	49	41
Endowment Fund.....	—	—	—	—	—	—	—	—	30	475
"Excavations at Phylakopi," sales.....	—	—	—	—	—	—	—	—	52*	28*
"Facsimile Codex Venetus," sales.....	—	—	—	—	—	—	—	—	93*	3*
Lantern Slides Account.....	—	—	—	—	—	—	—	—	—	15*
	805	787	813	945	990	998	1,047	1,292	1,390	1,614

* Receipts (less expenses).

ANALYSIS OF EXPENDITURE FOR THE YEARS ENDING :—

	31 May, 1897.	31 May, 1898.	31 May, 1899.	31 May, 1900.	31 May, 1901.	31 May, 1902.	31 May, 1903.	31 May, 1904.	31 May, 1905.	31 May, 1906.
	£	£	£	£	£	£	£	£	£	£
Rent.....	80	80	80	80	80	80	80	80	88	98
Insurance.....	15	15	15	15	15	15	15	16	18	13
Salaries.....	52	50	60	60	60	60	69	89	165	176
Library.....	94	93	61	73	74	82	89	50	100	95
Cost of Catalogue.....	—	—	—	—	—	—	—	35	—	—
Sundry Printing, Postage, and Stationery, etc.....	29	45	32	38	61	41	72	137	147	158
Printing and Postage, History of Society.....	—	—	—	—	—	—	—	—	24	—
Printing and Postage, Pro- ceedings at Anniversary.....	—	—	—	—	—	—	—	—	10	—
Lantern Slides Account.....	—	24	—	13	29	17	35	2	5*	—
Photographs Account.....	—	—	26	1	15	—	—			—
Cost of Journal (less sales).....	346	516	536	390	382	367	454	511	511	356
Cost of Journal, Reprint of Vol. XXIII.....	—	—	—	—	—	—	—	—	122	—
Grants.....	180	125	150	200	200	200	250	225	260	125
"Facsimile of the Codex Venetus of Aristophanes".....	—	—	—	—	—	—	210	30	—	—
"Excavations at Phylakopi".....	—	—	—	—	—	—	150	140	—	—
Commissions and Postage per Bank.....	—	—	—	—	—	3	2	—	—	—
Depreciation of Stocks of Publications.....	—	—	—	—	—	—	—	—	123	104
	796	948	960	890	916	865	1,432	1,335	1,573	1,095

* Expenses (less sales).

Dr. "JOURNAL OF HELLENIC STUDIES" ACCOUNT. FROM JUNE 1, 1905, TO MAY 31, 1906. Cr.

	£	s	d.	£	s	d.
To Printing and Paper, Vol. XXV., Part II., and XXVI., Part I.	305	18	0			
Plates	20	17	9			
" Drawing and Engraving	88	13	5			
" Editing and Sundry Contributions	60	3	6			
" Packing, Addressing, and Carriage to Members	47	12	11			
" Sundry	3	5	2			
	526	10	9			
	£526	10	9			
By Sales, including back Vols., from June 1, 1905, to May 31, 1906.				138	5	3
Per Macmillan & Co., Ltd.				13	7	7
" Hellenic Society						
" Back Vols. exchanged for Books for Library						
" Receipts for Advertisements						
Balance to Income and Expenditure Account						
				151	12	10
				6	10	0
				12	9	11
				355	18	0
				£520	10	9

"EXCAVATIONS AT PHYLAKOPH" ACCOUNT. FROM JUNE 1, 1905, TO MAY 31, 1906.

	Column showing Financial Result from Date of Publication to May 31, 1906.	Account for Current Year.	Column showing Financial Result from Date of Publication to May 31, 1906.	Account for Current Year.
Deficit Balance brought forward (excluding value of Stock)	£ 244 2 3	£ s d.	£ s d.	£ s d.
Balance on Current Year to Income and Expenditure Account	—	—	27 16 3	27 16 3
By Sale of 28 Copies during year	—	—	27 16 3	27 16 3
Deficit Balance from Publication at May 31, 1906 (excluding value of Stock)	—	—	216 6 0	—
	£244 2 3	£27 16 3	£244 2 3	£27 16 3

"FACSIMILE OF THE CODEX VENETUS OF ARISTOPHANES" ACCOUNT. FROM JUNE 1, 1905, TO MAY 31, 1906.

Column showing Financial Result from Part of Publication to May 31, 1906.	Account for Current Year.	Column showing Financial Result from Part of Publication to May 31, 1906.	Account for Current Year.
To Deficit Balance brought forward (excluding Value of Stock)	£. s. d. 129 19 7	By Sale of One Copy by the Hellenic Society ..	£. s. d. 7 7 0
" Insurance of Stock	2 4 6	" Share of Proceeds from Sale of Two Copies by the American Archaeological Institute ..	6 6 3
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Balance on current year to Income and Expenditure Account	8 5 2		
	<u>£135 7 8</u>		<u>£13 13 3</u>

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" Slides for Hire	7 5 0½	" Hire ..	11 9 1
" Photographs for Reference Collection	6 7 5½	" Sale of Catalogues	10 0 19 9
Balance to Income and Expenditure Account	15 7 9½		
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" Binding	17 8 1	" Donation	10 0 0
Exchanges for Journal	58 7 5	" Grant by Council	65 0 0
Balance forward to next year	6 10 0		
	<u>£75 15 6</u>		<u>£75 15 6</u>

BALANCE SHEET: MAY 31, 1906.

<i>Liabilities.</i>		<i>Assets.</i>	
To Debt Payable.....	£ s. d.	By Cash in Hand—Bank.....	£ s. d.
“ Subscriptions carried forward.....	292 19 8½	“ Deposits.....	141 13 5
“ Endowment Fund.....	519 0 0	Analyst Treasurer.....	290 0 0
(Includes legacy of £200 from the late Canon Adam Farrar)	505 10 0	Petty Cash.....	32 15 10
“ Life Compositions and Donations—			2 0 11
“ Total at June 1, 1905.....	£1094 19 0	“ Debts Receivable.....	379 10 9
Received during year, 6 m	94 10 0	“ Investments (Life Compositions)	174 11 1
£15 15½	1794 9 0	“ (Endowment Fund).....	1263 3 1½
Written off to Revenue,		“ Valuations of Stocks of Publications.....	500 0 0
“ Life Members deceased		“ Library.....	1763 3 1½
during year.....	21 0 0		611 8 0
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“ Sinking Account (Subscription paid twice).....	1773 9 0		
Excess of Assets over Liabilities at June 1, 1905.....	10 18 1		
Add Surplus Balance from Income and Expenditure Ac.	1 1 0		
	172 5 0		
	<u>172 5 0</u>		
	£3275 13 2		£3275 13 2

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(Signed)

ARTHUR J. BUTLER, }
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The Society for the Promotion of Hellenic Studies.

ENDOWMENT FUND.

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 ——— *Editor*. See *Hellenica*.
- Abbott (G. F.) *Tale of a Tour in Macedonia*. 8vo. 1903.
- Adamantinus, *Ἡπὶ δεξιῶν γρίκων*.
 See Rose (V.) *Anecdota Graeca*.
- Aeschylus. Anon. *The Orestes of Aeschylus*. [Quarterly.]
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- Amelung (W.) and Holtzinger (H.) *The Museums and Ruins of Rome*. 2 vols. 12mo. 1906.
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 ——— *Τέχνη ῥητορικὴ*. See Spengel, *Rhetores Graeci*.
- Annales de la Faculté des Lettres de Bordeaux. *Revue des Études Anciennes*, *Bulletin Hispanique*, *Bulletin Italien*. 8vo. Bordeaux. From 1906. *In progress*.
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 ——— **Stenographie.** 8vo. Berlin. From 1901. *In progress.*
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- Auldjo (J.)** *Journal of a Visit to Constantinople and some of the Greek Islands.*
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 6039 Fresco of Kefin. (Hall, *Great Civilisation of Greece*, frontispiece.)
 6545 Miscellaneous from temple repositories at Cnossos. (*E.S.A.* ix, p. 46, fig. 24.)
 6557 Designs from twelve Mycenaean gold discs.
 6541 Typical Mycenaean vases. (Walters, *Pottery*, pl. 15.)

GEOMETRIC AND ORIENTALISING PERIOD.

- 6550 Attica: Dipylon vase with early Attic inscription. (*Arch. Mus.* vi, pl. 3.)
 6559 Cnoss: orientalisising vase. (cf. *B.M. Guide*, p. 171, fig. 58.)
 5457 Naucratis, selected fragments of pottery. (*Naucratis*, pl. 7.)
 7544 Præses: plate in orientalisising style. (*B.S.A.* x, pl. 3.)

SCULPTURE.

* = from original or from photographic reproduction of original.
 † = from cast.

EARLY PERIOD.

- 6544 Argive Apollo.* (*Dolphins*, v, pl. 1.)
 6539 " " *profile and back view. (ib. pl. 2.)
 6181 Nike of Archamios† restored.
 6392 Relief of a charioteer.* Acrop. Mus.
 5984 Fragment of a funerary relief, two female figures.*
 529 Cyprus, archaic relief of Heracles and Geryon. (*Cl. J.H.S.* viii, p. 71.)
 6390 Selinus Metopes from first temple, with reconstructed architectural setting.
 6367 " Metope from temple of Hera, dying giant.*
 6358 Argos, E. pediment, standing warrior. *Telamones.*
 6359 " " kneeling archer. *Heracles.*

FINE PERIOD.

- 6396 Samos drawings of the pediments of the Parthenon.
 6398 East pediment, reconstruction with architectural setting.
 6597 " S. end, Samos's drawing.
 6597 West pediment. Naisi† anonymous drawing. (*Antike Denkmäler*, pl. 6.)
 6182 Nike of Parosius restored.*
 6591 Selinus. Metope from later temple. Heracles and Amazon.*
 6188 Young Satyr of Pinxitales,* torso in Louvre.
 6190 Mammol, after Scopas.*
 6190 " " restored.*
 7236 Votive relief to Asclepius, in form of a sandal.* (*Cl. Arch. für Religionswiss.* viii, pl. 1.)
 6043 Votive relief, Hermes, Orpheus, Eurydice.* Villa Albani.
 5979 Alexander sarcophagus, views of the two ends.
 5483 " " S. end, the sculpture in the gable.
 6033 Sarcophagus of mourning women, general view.
 6681-2 " " " " views of the ends.
 6688 Lycian sarcophagus, from Sidon, general view.
 6684 " " " " first side.
 6685 " " " " second side.
 6686 " " " " both ends.

LATE PERIOD.

- 6570 Archadistic relief of a warrior with funerary serpent.* B.M.
 4572 "Miracle working" statuette, a goddess with pierced breasts.* B.M.

BRONZES.

- 6577 Archaic Græco-Egyptian bronze statuette * from Badjez. B.M.
 6583 Mirror case, Heracles wrestling with the lion. * B.M.
 6589 Seated statuette of Hermes * from Patmythia. B.M.
 6582 Head of Artemis (part of the decoration of a snat). Two grotesques. * B.M.

TERRACOTTAS.

- 6590 Archaic relief representing a funeral procession. * (Hayot, *Monuments*.)
 6575 Tanagra statuettes. Two ladies. * B.M.
 6574 "Myrina" statuettes. Aphrodite. * B.M.
 6573 Contents of a bride's grave: nude figure on throne, marriage *Ides*, boots, *Telegraph*. * B.M.
 6181 Genie rendering of the boy extracting a thorn.

VASES.

- * = photographic view of whole vase from original.
 * = picture subject only from an adequate illustration.

BLACK FIGURED VASES.

- 6394 Birth of Athena, figures of Zeus and Athena only.*
 6396 Amphiaraios vase (*Uten*, *For.* 1889, pl. 10) sketch of seated figure of Halimolux.*
 6520 Heracles and the Nemean lion.* (*Gerh. A. P.* 192)
 6521 " " Achelous.* (*Gazette Archéologique*, 1875, pl. 26)
 6529 Satyr and Maenad.*
 6516 Wrestling match.* (*J. H. S.* 1, pl. 6)
 6183 A smith's shop.
 6186 A shoemaker's shop.

RED-FIGURED VASES, &c.

- 6395 Interior of an Attic cylix: the Gorgonion.* In transitional technique.
 6378 Apollo, Artemis, and Leto.*
 6399 Zeus and Athena } for illustrating the composition of the E. pediment of the Parthenon.
 6046 " " " }
 6593 Athena and Poseidon.* Kertsch Museum.
 6591 Dionysos, mystic marriage of. Polyakrume vase on red ground.* B.M.
 6590 Id, the figure subject only.*
 6507 Heracles and Achelous.* (*Gerh. A. P.* 115)
 6505 " wrestling.
 6502 Boys boxing, fragment. (*Meisterhahn*, fig. 12)
 6592 Group of Attic funerary *lekythoi*.* B.M.

COINS.

- 6354 Asine, E., with figure of Dryops.
 6530 Rhodes, R. (B.M. *Guide*, III. A. 37.)
 6434 Syracuse, R. (*Cl. Head. Hist. Num.* p. 151, fig. 93.)
 6553 Eucratides of Bactria, A'. Paris Cabinet.

INSCRIPTIONS.

In this series the arrangement adopted in K. S. Roberts' *Introduction to Greek Epigraphy* Vol. I, has been followed and the references throughout have been given to that work only. The slides however have been made, where possible, from facsimile reproductions.

* = reproduced from a photograph of the original.

‡ = reproduced from facsimile reproduction of the lettering.

Where no sign is added the slides have been made from the conventional type.

The main Catalogue affords abundance of material for supplementing this series by views and other slides bearing on the inscriptions. A few such supplementary slides have been here inserted.

ISLANDS.

- 6601 Roberts, 1a, c, i, s. Thera: ca. 650 B.C. Selection of short archaic inscriptions found on rocks and tombs.*
 6602 Roberts, 7. Melos: first period, ca. 600-550 B.C. Metrical inscription on column of Parian marble.
 6603 Roberts, 3a, b, c, i. Melos: second period, ca. 550-500. Selection of tomb inscriptions.* Cf. also, for form and position of the Σ 4518, coin of Posidonius.
 6604 Roberts, 8i, m. Melos: third period, ca. 490-415. Selection of tomb inscriptions.*
 6605 Roberts, 2g, k. Melos: fourth period, shortly after the Peloponnesian war. Selection of tomb inscriptions.*
 6606 Roberts, 2y. Gortyn: ca. 600. First discovered slab of the longest archaic inscription yet found.* Louvre.
 6607 Roberts, 13. Eretnopoula (= ancient Itanos). Retrograde inscr. over the figure of a fish.* Fitzwilliam Mus., Cambridge.
 6608 Roberts, 25. Naxos: probably before 600 B.C. Inscribed on the archaic image dedicated at Delos by Nicandra to Artemis.* Cf. also 3614, view of the statue.
 6609 Roberts, 27. Naxos: inscribed on the base of an archaic colossus dedicated at Delos by the Naxians to Apollo.* Cf. also 5545, 4634, views of the upper half of the colossus *in situ*, and 5546, view of the base *in situ*.

ATTICA.

- 6610 Roberts, 34. Oldest extant Attic inscription, probably seventh century. Retrograde, on a Dipylon Vase.* Cf. also 6650, view of this Vase.* (*Ath. Mitt.* vi. pl. 2.)
 6611 Roberts, 37. Ca. 600 B.C. Stèle of Enialon.*
 6612 Roberts, 42. Sigeum marble, probably 600-575 B.C. Stèle of Phanodorus: the lower inscription only is Attic. B.M.*
 6613 Roberts, 45. Salaminian decrees: 575-525 B.C., oldest extant Attic decree.*
 6614 Roberts, 56. Altar dedicated by Pisistratus son of Hippias, 535-510 B.C. (Cf. Thucyd. vi. 54, where the altar is mentioned.)
 6615 Roberts, 68. Fragment of a marble base. Before 500 B.C.*
 6616 Roberts, 66. List of the fallen in the Thasian War. 485-465 B.C.
 6617 Roberts, 69. Naxos marble, 469 B.C. (Roberts) or 459-8 B.C. (Bosch). Commemorates numbers of tribe of Erechtheis fallen in Egypt, etc. Louvre.
 6618 Roberts, 70. Portion of tribute list. 446 B.C. Attic alphabet in its latest settled form.
 6619 Roberts, 71. Dedication of Aristocrates. Before the Peloponnesian war. (Cf. Aristoph. *Aves*, 125, 6. Thucyd. viii. 87, 92.)

ARGOS.

- 6620 Roberts, 75. Bronze helmet from Olympia commemorating Argive victory over Corinth, Ca. 536 B.C. B.M.*
 6621 Roberts, 81. Part of a basis of Parian marble belonging to a statue by Atochos, from Olympia. Before 450 B.C.*

CORINTH AND ITS COLONIES.

- 6622 Roberts, 85. Tomb inscription of 'Dreinnia,' 600-550 B.C. Boustrophedon.*
 6623 Roberts, 90³⁸⁻⁴⁰/114. Inscriptions on fragmentary reliefs from Corinth. Berlin.*
 Cf. also 983 for a general view of these tablets.
 Cf. also for the form of the kopper, 5332, coin of Corinth and 5434, coin of Syracuse.
 6624 Roberts, 111. Helmet of Hiero of Syracuse. 474 B.C. B.M. Commemorates victory over Kameans off Cumae.*

IONIAN ALPHABET.

- 6625a and b. Roberts, 120. Abou Symbol. Probably 594-589 B.C. (Pammetichus II.) rather than 654-617 B.C. (Peisium. I.) Inscriptions written by Greek mercenaries on seated colossal figures.*
 6626 Roberts, 122. Miletus. Boustrophedon inscription on a lion. B.M.*
 6627 Roberts, 145. Halicarnassus. Ca. 455 B.C. The Lygdamis inscription. The Ionic alphabet as legally adopted at Athens 403 B.C. B.M.*

WESTERN GROUP.

- 6628 Roberts, 169, 170, 171, 172, 173, 174, 175, 176. Euboea. Selection from 400 leaden plates found near Syra.*
 6629 Roberts, 216, A, C. Boeotia.*
 6630 Roberts, 232. Oenothia. Temp. Peloponnesian war. Bronze tablet containing treaty between Oenothia and Chalcion. B.M.*
 6631 Roberts, 248. Laconia. Stela of Glaukatis. Ath. Nat. Mus.*
 6632 Roberts, 255. Laconia. Dedication of Pleisthiadas. Sparta Mus. Ca. 500 B.C.*
 6633a and b Roberts, 257. Laconia. Ca. 475-450 B.C. Bronze plate from Tegea recording a deposit of money by Xouthias.
 6634 Roberts, 259. Laconia. Ca. 479 B.C. Serpent column dedicated after Plataea at Delphi: now in Constantinople.*
 Cf. also 6124 Basis of the tripod *in situ* at Delphi.
 6652 Restoration of the tripod. (*Jahrb.* I. p. 129.)
 3335 View of Hippodrome at Constantinople showing serpent column *in situ*.
 6635 Roberts, 294. Laconia. Ca. 400 B.C. Stela of Damonon. Sparta Mus.*
 6636 Roberts, 293. Laconia. Geronthrae. Ca. 418 B.C. *as de woXwpe* inscription referring to the battle of Mantinea.*
 6637 Roberts, 297. Laconia. Ca. 403-398 B.C. Part of a decree recording restoration of liberty to Delians by Sparta after Aegospotami.*
 6638 Roberts, 299. Arcadia. Marble base found at Olympia dedicated by Cynisaea.*
 6639 Roberts, 285. Arcadia. 365-363 B.C. Bronze plate from Olympia dating probably from the time when the Arcadians and Pisians jointly administered the affairs of the temple of Zeus.*
 6640 Roberts, 291. Elis. Ca. 600 B.C. Bronze plate from Olympia recording 100 years alliance between Eleans and Heraeans. B.M.*
 6641 Roberts, 297. Elis. Bronze plate from Olympia recording alliance of fifty years between two otherwise unknown communities, the Anaeti and Metapui.*
 6642 Roberts, 300. Elis. Bronze plate from Olympia.*
 6643 Roberts, 302. Achaia and colonies. Ca. 600 B.C. Sandstone block from Metapontum. Boustrophedon (partially).*

ABECEDARIA.

- 6644 Roberts, p. 16. Formello: on a vase found in a tomb at Formello, near Veil. Greek alphabet (given twice) of western group and Chalcidian origin: also an Etruscan inscription.*
- 6645 Roberts, p. 17. Caere: on a vase found in a tomb at Caere (Cervetri). Greek alphabet of western group and Chalcidian origin.*
- 6646 Roberts, p. 18. Colle: painted on the wall of a tomb at Colle. Only decipherable as far as α. Western group and Chalcidian origin.*
- 6648 Roberts, p. 19. Cervetri: painted on pottery fragment. Benetrophonon. E T only preserved.*

MISCELLANEA.

- 6388 The vine as the origin of characteristic forms in Ionic architecture (from a sketch by Schaff).
- 6522 Acorn-bus growth. (*Jahrb.* xi, p. 122, fig. 4.)
- 6535 " " Kerner and Olivier, *Nat. Hist.* vi, p. 772, fig. 434.)
- 6587 Gold diadem: gold band with central knot. B.M.
- 6588 Intaglio in gold and silver. B.M.
- 7563 Jewellery from Praescia.
- 7561 Jewellery from Praescia.
- 7289 Skull ornamented with spirallform discs, as excavated at Praescia.
- 6584 Bronze helmet from Olympia. B.M.
- 6586 Archaic ivory plaques. B.M.
- 6184 Ostrakon with name of Themistocles.

NOTICE TO CONTRIBUTORS.

THE Council of the Hellenic Society having decided that it is desirable for a common system of transliteration of Greek words to be adopted in the *Journal of Hellenic Studies*, the following scheme has been drawn up by the Acting Editorial Committee in conjunction with the Consultative Editorial Committee, and has received the approval of the Council.

In consideration of the literary traditions of English scholarship, the scheme is of the nature of a compromise, and in most cases considerable latitude of usage is to be allowed.

(1) All Greek proper names should be transliterated into the Latin alphabet according to the practice of educated Romans of the Augustan age. Thus α should be represented by *e*, the vowels and diphthongs *υ*, *αι*, *οι*, *ου* by *y*, *ae*, *oe*, and *u* respectively, final *-ας* and *-ου* by *-us* and *-um*, and *-πος* by *-er*.

But in the case of the diphthong *ει*, it is felt that *ei* is more suitable than *e* or *i*, although in names like *Laodicea*, *Alexandria*, where they are consecrated by usage, *e* or *i* should be preserved, also words ending in *-ειος* must be represented by *-eum*.

A certain amount of discretion must be allowed in using the *u* terminations, especially where the Latin usage itself varies or prefers the *o* form, as *Delos*. Similarly Latin usage should be followed as far as possible in *-e* and *-a* terminations, e.g., *Prisen*, *Snagrua*. In some of the more obscure names ending in *-πος*, as *Αεαγπος*, *-er* should be avoided, as likely to lead to confusion. The Greek form *-ον* is to be preferred to *-o* for names like *Dion*, *Hieron*, except in a name so common as *Apolla*, where it would be pedantic.

Names which have acquired a definite English form, such as *Corinth*, *Athens*, should of course not be otherwise represented. It is hardly necessary to point out that forms like *Hevules*, *Mercury*, *Minerva*, should not be used for *Heracles*, *Hermes*, and *Athena*.

(2) Although names of the gods should be transliterated in the same way as other proper names, names of personifications and epithets such as *Nike*, *Hymenœia*, *Hyakinthios*, should fall under § 4.

(3) In no case should accents, especially the circumflex, be written over vowels to show quantity.

(4) In the case of Greek words other than proper names, used as names of personifications or technical terms, the Greek form should be transliterated letter for letter, *k* being used for *κ*, *ch* for *χ*, but *y* and *u* being substituted for *υ* and *ου*, which are misleading in English, e.g. *Nike*, *apoxyomenos*, *diadumēnos*, *rhyton*.

This rule should not be rigidly enforced in the case of Greek words in common English use, such as *ægis*, *symposium*. It is also necessary to preserve the use of *ou* for *ου* in a certain number of words in which it has become almost universal, such as *boule*, *gerousia*.

(5) The Acting Editorial Committee are authorised to correct all MSS. and proofs in accordance with this scheme, except in the case of a special protest from a contributor. All contributors, therefore, who object on principle to the system approved by the Council, are requested to inform the Editors of the fact when forwarding contributions to the Journal.

In addition to the above system of transliteration, contributors to the *Journal of Hellenic Studies* are requested, so far as possible, to adhere to the following conventions:—

Quotations from Ancient and Modern Authorities.

Names of authors should not be underlined; titles of books, articles, periodicals, or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus:

Six, *Jahrb.* xviii. 1903, p. 34.

or—

Six, *Prologenes* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e.g. Dittenb. *Syll.*³ 123.

Titles of Periodical and Collective Publications.

The following abbreviations are suggested, as already in more or less general use. In other cases no abbreviation which is not readily identified should be employed.

- A.-E.M.* = Archäologisch-epigraphische Mittheilungen.
Ann. d. I. = Annali dell' Instituto.
Arch. Anz. = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).
Arch. Zeit. = Archäologische Zeitung.
Ath. Mitt. = Mittheilungen des Deutschen Arch. Inst., Athenische Abtheilung.
Baumeister = Baumeister, Denkmäler des klassischen Alterthums.
B.C.H. = Bulletin de Correspondance Hellénique.
Berk. Vas. = Furtwängler, Beschreibung der Vasensammlung zu Berlin.
B.M. Bronzes = British Museum Catalogue of Bronzes.
B.M.C. = British Museum Catalogue of Greek Coins.
B.M. Inscr. = Greek Inscriptions in the British Museum.
B.M. Vases = British Museum Catalogue of Vases, 1893, etc.
B.S.A. = Annual of the British School at Athens.
Bull. d. I. = Bullettino dell' Instituto.
Bursli = Bursli, Griechische Geschichte.
C.I.G. = Corpus Inscriptionum Graecarum.
C.I.L. = Corpus Inscriptionum Latinarum.
Cl. Rev. = Classical Review.
C.R. Acad. Inscr. = Comptes Rendus de l'Académie des Inscriptions.
Dar.-Sagl. = Daremberg-Saglio, Dictionnaire des Antiquités.
Dittenb. O.G.I. = Dittenberger, Orientis Graeci Inscriptiones Selectae.
Dittenb. Syll. = Dittenberger, Sylloge Inscriptionum Graecarum.
Ἐφ. Ἀρχ. = Ἐφημερίς Ἀρχαιολογική.
G.D.I. = Collitz, Sammlung der Griechischen Dialekt-Inschriften.
Gerh. A.V. = Gerhard, Auserlesene Vasenbilder.
G.G.A. = Göttingische Gelehrte Anzeigen.
Head, H.N. = Head, Historia Numorum.
I.G. = Inscriptiones Graecae.¹
I.G.A. = Röhl, Inscriptiones Graecae antiquissimae.
Jahrb. = Jahrbuch des Deutschen Archäologischen Instituts.
Jahresh. = Jahreshefte des Österreichischen Archäologischen Institutes.
J.H.S. = Journal of Hellenic Studies.
Le Bas-Wadd. = Le Bas-Waddington, Voyage Archéologique.
Michel = Michel, Recueil d'Inscriptions grecques.
Mon. d. I. = Monumenti dell' Instituto.
Müller-Wiss. = Müller-Wissler, Denkmäler der alten Kunst.
Mus. Marble. = Collection of Ancient Marbles in the British Museum.
Neue Jahrb. kl. Alt. = Neue Jahrbücher für das klassische Alterthum.
Neue Jahrb. Phil. = Neue Jahrbücher für Philologie.

¹ The attention of contributors is called to the fact that the titles of the volumes of the second issue of the Corpus of Greek Inscriptions, published by the Prussian Academy, have now been changed, as follows:—

<i>I.G.</i>	I.	Inscr. Atticae anno Eu. aetatis vetustiores.
"	II.	" " aetatis quae est inter Eucl. ann. et Augusti tempora.
"	III.	" " aetatis Romanae.
"	IV.	" Argolidis.
"	VII.	" Megaridis et Boeotiae.
"	IX.	" Graeciae Septentrionalis.
"	XII.	" insul. Maris Aegaei praeter Delum.
"	XIV.	" Italiae et Siciliae.

- Niese = Niese, Geschichte der griechischen u. makedonischen Staaten.
Num. Chr. = Numismatic Chronicle.
Num. Zeit. = Numismatische Zeitschrift.
 Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.
Philol. = Philologia.
 Ramsay, C.B. = Ramsay, Cities and Bishoprics of Phrygia.
Rev. Arch. = Revue Archéologique.
Rev. Ét. Gr. = Revue des Études Grecques.
Rev. Num. = Revue Numismatique.
Rev. Philol. = Revue de Philologie.
Rh. Mus. = Rheinisches Museum.
Röm. Mitth. = Mittheilungen des Deutschen Archäologischen Instituts, Römische Abtheilung.
 Roscher = Roscher, Lexicon der Mythologie.
T.A.M. = Tituli Asiae Minoriae.
Z.f.N. = Zeitschrift für Numismatik.

Transliteration of Inscriptions.

- [] Square brackets to indicate additions, i.e. a lacuna filled by conjecture.
 () Curved brackets to indicate alterations, i.e. (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.
 < > Angular brackets to indicate omissions, i.e. to enclose superfluous letters appearing on the original.
 . . Dots to represent an unfilled lacuna when the exact number of missing letters is known.
 - - - Dashes for the same purpose, when the number of missing letters is not known.
 Uncertain letters should have dots under them.
 Where the original has iota adscript, it should be reproduced in that form; otherwise it should be supplied as subscript.
 The aspirate, if it appears in the original, should be represented by a special sign, ^h.

Quotations from MSS. and Literary Texts.

The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions* :-

- () Curved brackets to indicate only the resolution of an abbreviation or symbol.
 [] Double square brackets to enclose superfluous letters appearing on the original.
 < > Angular brackets to enclose letters supplying an omission in the original.

The Editors desire to impress upon contributors the necessity of clearly and accurately indicating accents and breathings, as the neglect of this precaution adds very considerably to the cost of production of the *Journal*.

STATUE OF A BOY LEANING ON A PILLAR.

[PLATES I., II.]

THIS statue, which was in the possession of Dr. Philip Nelson of Liverpool, has recently become the property of the Bavarian 'Verein der Kunstfreunde' who allow the charming work to be exhibited on loan in the Munich Glyptothek.¹

That the original, of which this statue is a copy, was famous and popular in antiquity is amply proved by the large number of extant replicas. The present example brings up to twenty the number of authenticated replicas given in the English edition of Furtwängler's 'Masterpieces' (p. 272, note 4) and the list could doubtless easily be increased if the eleven replicas in Rome (Matz-Duhn, *Antike Bildwerke in Rom*, vol. i. pp. 275-278) and the thirty-seven replicas enumerated by M. Salomon Reinach in his *Répertoire de la Statuaire* (Index, s.v. 'Narcissus') could be thoroughly examined and sifted. This is a task which I had proposed to myself in view of this paper, but which I have as yet been unable to carry out.

It is strange that no other instance of the type appears to exist in the rich English private collections, if we except the entirely restored torso, with the movements reversed, at Rossie Priory (Michaelis, *Ancient Marbles in Great Britain*, Rossie, No. 1) and the more than doubtful example at Holkham (Michaelis, Holkham 20, Reinach, *Répertoire* i. p. 189, 1) which has been turned into a 'Meleager.'

The publication of this statue was courteously offered to me by the English owner in May of last year, before it passed to Munich. The editors, however, having prepared and lettered the plates for this number of their Journal, cannot well withdraw or postpone them. At present, therefore, I must be content to contribute a few words of description based upon the photographs, and upon observations kindly sent to me by the former owner, though I shall probably seek to resume the subject when I have examined the replicas outside the list in the 'Masterpieces.' I may add that this 'Boy' is only one item among a number of notes upon 'inedited works of

¹ See a note on p. 298 of the *Burlington Magazine* for January 1906.

antique art in English private collections,' the publication of which, however, other more urgent work has obliged me to postpone.

The restorations in our statue are very numerous and apparently not altogether happy. The nose, the left arm from the elbow, the legs from the knees, the tree trunk and the plinth are all modern. Moreover, the left arm is wrongly restored with the hand turned outward, towards the spectator, instead of backward with the palm resting on the supporting pillar. The correct movement and pose of this arm are well known from the beautiful replica found in the Nile Delta and purchased by the Louvre in 1894 (published by E. Michon in *Monuments Piot*, i. Pl. xvii.; text pp. 115-128). The head of our Nelson-Munich replica has been badly replaced, owing to the markedly clumsy restoration of the neck: the pose should be corrected, again by comparison with the Louvre example. But in itself the head, save for the restored nose, seems to reproduce with simplicity and sincerity the lines of a distinguished original of the latter half of the fifth century B.C. Furtwängler, who first brought the type into prominence in his 'Masterpieces' (pp. 272-275; cf. also his article in *Bull. d. I.* 1877, p. 158), places the lost original within a cycle of Argive creations, immediately influenced by Polykleitos. In fact from the pose of the feet he links the statue to a group of works more or less closely connected with the 'Pythokles,' the basis of which is extant at Olympia. Furtwängler shews, however, that the type, though Polykleitan in its essence, is not uninfluenced by Attic models (*ib.* p. 274). On the other hand, M. Michon, to whom we owe an excellent critical notice of the Louvre statue, inclines rather to the theory of an Attic origin. The view taken by Dr. Amelung in his descriptions of the replicas in the Columna Gallery (Arndt-Amelung-Bruckmann, *Einzelanfahrungen*, No. 1139) and in the Museo Chiaramonti (Amelung, *Skulpturen des Vaticanischen Museums*, vol. i. No. 536, Plate 70) is that the type is the direct product of combined Attic and Argive influence with preponderance of the Attic.²

In the Louvre, and apparently also in the Munich figures, the broad frontal construction is especially interesting, and proves at once the comparatively early period of the original. The forms are soft, yet the absence of any roundness of modelling is conspicuous. This flatness of the planes—always a concomitant of frontal construction—gives effect to the beautiful, curving silhouette. The design is severely self-contained, the silhouette finding its starting and meeting points at what affords the key, so to speak, to the whole composition, the supporting palm of the left hand. The chiasmic construction is peculiarly emphasized, the weight on the left hand being balanced by the weight on the right leg, and the bend of the right elbow by the bend of the left knee.

The marked inclination of the head, the melancholy satiety of the expression, the weariness of body suggested by the pose of the left hand, all seem carefully thought out in order to express some psychological state

² Until I have examined more replicas, I do not feel competent on Dr. Amelung's theory of two versions of the 'Narcissus,' the one more Polykleitan, the other more Attic in character.

peculiar to the subject represented. As M. Michon subtly remarks (*Mon-Piot*, i. p. 125) 'son laisser aller va au delà du simple repos physique et s'étend du corps à l'esprit.' In spite too of the sweetness of the forms of the face, there is yet a sombreness of expression to which we are unaccustomed before the Roman period and the portraits of Antinous.² This attempt to attain to spiritual individuality gives the statue an almost unique place among the more generalized creations of the period to which it belongs technically as well as structurally, and efforts to discover the name of the being represented have been plentiful, although, owing to lack of corroborative evidence, none brings definite conviction. Furtwängler disposes of the name of Narcissus by which the type has long been known, and of his own earlier interpretation of Hyacinthus, and at the same time he wishes to substitute that of Adonis. The present writer inclines to the theory, already many times put forward and rejected, that the figure has a sepulchral intention, that it commemorates some young athlete snatched away perhaps in the moment of success and victory. The so-called 'Adonis' has been brought by Furtwängler into relation with the earlier versions of the 'wearied Herakles' leaning forward on his club; nor must it be forgotten that this type of Herakles was shewn by Mr. A. S. Murray to have been transformed into a sepulchral figure in the beautiful Athenian stele acquired a few years ago for the British Museum (*J.H.S.* xxii. 1902, Plate I).

The dimensions of the statue, which is about two-thirds life size, are, I am informed, identical with those of the Louvre replica (Michon, p. 116), the total height being 1.125 metre.

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² The melancholy of the expression has been more than once compared with that of the 'Wounded Amazon' of Polykleitos. But if the two works are considered side by side, a deeper and more individual emotion will be felt to pervade the 'Narcissus' than the 'Amazon.'

THE PANKRATION AND WRESTLING.

III.

[PLATES III.-V.]

A.—*The Nature of the Pankration.*

THE combination of boxing and wrestling known as the pankration was a development of the primitive rough and tumble. To get his opponent down and by throttling, pummelling, biting, kicking, to reduce him to submission is the natural instinct of the savage or the child. But this rough and tumble is not suitable for an athletic competition: it is too dangerous and too undisciplined. To the early Greeks, athletics were the recreation of a warrior class, they were not the serious business of life or even a profession, and in an age of real warfare the warrior's life was too valuable to be endangered for sport. Moreover, without some form of law athletic competitions are impossible, and in the growth of law the simpler precedes the more complex. Hence it was only natural that particular forms of fighting, such as boxing and wrestling, should be systematized first, and so made suitable for competitions before any attempt was made to reduce to law the more complicated rough and tumble of which they both formed parts. Wrestling and boxing were known to Homer, but not the pankration, and Greek tradition was following the natural order of evolution in assigning the introduction at Olympia of wrestling to the 18th, of boxing to the 23rd, and of the pankration to the 33rd Olympiad.

We have already seen that the essential difference between wrestling and the pankration is that in the former the object is to throw an opponent, in the latter the struggle goes on until one of the two pankratiasts acknowledges his defeat (*ánayopevetai*).¹ The Spartans, we are told, were therefore forbidden to compete either in the pankration or in boxing, because it was considered disgraceful for a Spartan to acknowledge defeat. Another reason perhaps for the prohibition was that at Sparta the primitive rough and tumble unrestricted by any laws, and unrefined by science² was practised as a mere test of

¹ Phil. Gym. 2.

² Phil. Im. II. 57 c. vol. xxv. of this Journal, p. 19, n. 27.

endurance and as a training for warfare, and it was felt instinctively that such an exhibition of brute force was not fit for an athletic competition. But at Olympia and all the great games, the pankration was subject to the *νόμος ἐναγώνιος*, and was, at all events in its best period, a contest no less of skill than of strength.

B.—*Laws of the Pankration.*

The fullest account which we possess of the pankration is in Philostratus' picture of the death of Arrhichion.² After vividly describing the scene and the enthusiasm and excitement of the spectators he continues: οἱ παγκρατιάζοντες κεκινδυνευμένοι προσχρῶνται τῇ πάλῃ, δεῖ γὰρ αὐτοῖς ὑπτιασμὶν τε οὐ μὴ εἶσιν ἀσφαλεῖς τῷ παλαίοντι καὶ συμπλοκῶν ἐν αἷς περιγίγνεσθαι χρὴ οἷον πίπτοντα, δεῖ δὲ αὐτοῖς καὶ τέχνης ἐς τὸ ἄλλοτε ἄλλως ἄγχειν, οἱ δὲ αὐτοὶ καὶ σφυρῶ προσπαλαίουσι καὶ τὴν χεῖρα στρεβλοῦσι προσόντος τοῦ παίειν καὶ ἐνάλλεσθαι, ταῦτ' γὰρ τοῦ παγκρατιάζειν ἔργα πλὴν τοῦ δάκνειν καὶ ὀρύττειν. Λακεδαιμόνιοι μὲν οὖν καὶ ταῦτα τομίζουσιν ἀπογυμνάζοντες, οἶμαι, ἑαυτοὺς ἐς τὰς μάχας, Ἕλαιοι δὲ καὶ οἱ ἄγῳνες ταῦτ' μὲν ὑφαιροῦσι, τὸ δὲ ἄγχειν ἐπαινοῦσιν.

It would be difficult to give a more concise description of the pankration. Wrestling, hitting, and kicking are employed: the wrestling is *κεκινδυνευμένη*; victory is usually secured by *ἄγχειν*; *δάκνειν* and *ὀρύττειν* alone are prohibited. The details of the description will be considered later: for the present we must confine our attention to the two things prohibited. *Δάκνειν* explains itself, and has been illustrated in my last article.³ *Ὀρύττειν* is more difficult. Liddell and Scott translate it 'to dig or give a heavy blow.' The translation is pointless; we cannot suppose that in such a contest only *light* blows were allowed:⁴ nor can we distinguish *παλεῖν* and *ὀρύττειν* as striking with an open hand and with the fist respectively; for the Panathenaic vases prove conclusively that striking with the fist was allowed. The clue to the meaning of *ὀρύττειν* will be found in a closer examination of two other passages in which it occurs, Aristophanes, *Aves* 442 and *Pax* 899. In both passages there is an obvious reference to the rules and methods of the pankration; in the *Aves* indeed the reference is to the very prohibition quoted by Philostratus. In both passages *ὀρύττειν* is used in *sensu oborto*,⁵ and the adjoining words give us the true meaning. It means to injure an opponent by digging the hand or fingers into certain tender parts of an opponent's body. I should be inclined to give it a general meaning so as to include forcing the fingers into an opponent's eye.

² *Loc. cit.*

³ Vol. xxv. p. 272. Cp. also Phil. *loc. cit.* 6, 12, a description of the sports of Erotes, and Lucian, *Demon*, 49 *κατακαχέονται καὶ παρὰ τὸν πόδα ἐναγώνιος δάκνουσιν*.

⁴ Pindar, for example, speaks of the *καρτερὸν*

δύναμις of the pankration (*Nem.* iii. 29); cp. *Isthm.* v. 60.

⁵ Cf. vol. xxv. p. 15, n. 3. The word *ἀκαταμάχῳ* is used exclusively in an erotic sense, and there is no evidence for its use as a wrestling term.

A kylix in the B.M. E 78 (Fig. 1) gives us a vivid picture of such a scene. One of the pankratiasts has inserted his thumb into his opponent's eye as if to gouge it out, and the official is hastening up with his rod uplifted to interfere and punish such an act of foul play. Since I wrote the above, The Rev. C. W. Townsend has pointed out to me that this extension of the meaning of *ὀρύττειν* is confirmed by the next remark of Peisthetairus in the *Aves*, τῷ φθαλμῷ λόγω, and he makes the interesting suggestion that *ὀρύττειν*, besides its obvious meaning in the passage, means 'to scratch.' In view of

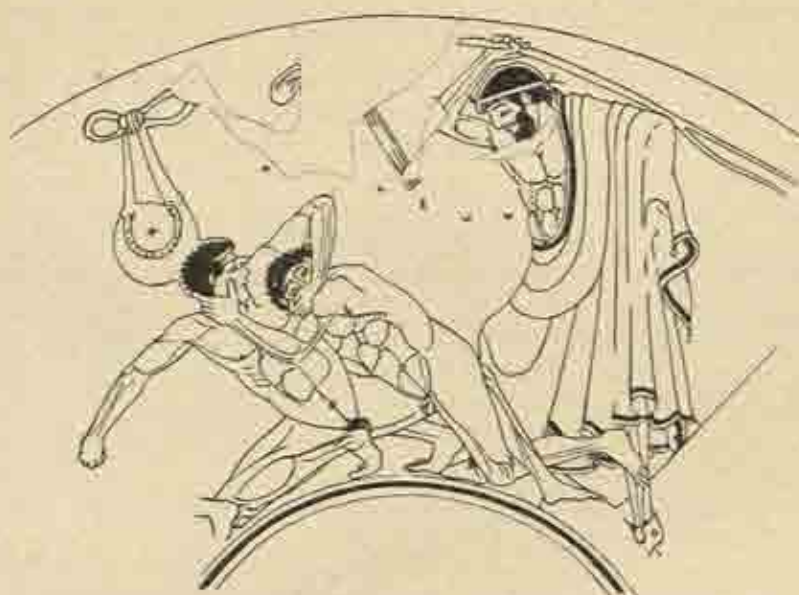


FIG. 1.—B.M. E 78. (After Hartwig, *Meisterschale*, Fig. 53.)

this I should be inclined to see another example of *ὀρύττειν* in Fig. 3 where one pankratiast digs his fingers into the other's mouth, and the official again is interfering.

C.—The Standing Pankration.

The pankration may be divided into two parts τὸ ἄνω παγκράτιον and τὸ κάτω παγκράτιον. In the former the opponents endeavour to throw each other to the ground employing not only all the tricks of ὀρθή πάλη but also hitting and kicking.

The wrestling is described as *κεκινδυνευμένη*, an epithet appropriate to such throws as the flying mare,¹ and also to the various legholds which though too dangerous for ὀρθή πάλη were freely used in the pankration.² Thus Anacharsis in Lucian's dialogue exclaims καὶ ἦν ἰδοὺ ἀράμενος ἐκείνος τὸν

¹ v. *J.H.S.*, vol. xiv, pp. 23, 268.

² v. *ib.* pp. 26-28, 283-286, Figs. 19-23,

where various illustrations of and references to legholds are collected.

ἕτερον ἐκ τοῖν σκέλων ἀφῆκεν εἰς τὸ ἔδαφος. An illustration of these words may perhaps be seen in a much mutilated group on a kylix from the Bibliothèque Nationale published by Hartwig.⁹ One wrestler is kneeling on his left knee and having seized his opponent between the legs lifts him up and bends forward as if to throw him to the ground. All that we can see of his opponent is his right foot hanging over the other's back. Another good illustration of a leghold is afforded by a gem in the British Museum (Fig. 4), representing a wrestler with his head 'in chancery' seizing his opponent by the thigh. In this case we cannot say which of the two is the attacker, and whether the leghold is employed in attack or defence; and the same is true of the type represented on the coins of Aspendus,¹⁰ where one wrestler has caught his opponent's leg and appears to be tilting him backwards. A further variety described by Philostratus perhaps belongs rather to ground wrestling, but may be mentioned here for convenience. Speaking of the short, thickset type of pankratiast, οἱ ἐν μικρῷ μεγάλοι, he ascribes their success to their skill in wrestling. They are, he says, quick and active and able to extricate themselves from the most hopeless grips, ἐπιστηριζόμενοι τῇ κεφαλῇ καθάπερ βάσει.¹¹ I know of no representation of this scheme in Greek art, but it is depicted clearly on the tombs of Beni-Hassan and in the present day it is no uncommon sight to see a wrestler picked up by his legs supporting himself on his hands and head.

Again the wrestling of the pankration is *κεκιδιαννόμενη* because the pankratiast employs such means as *στρεβλοῦν* and *ἄγχειν*. These tricks belong principally to the later ground wrestling, but they are also possible in the standing pankration. As an example of *στρεβλοῦν* we have the Sicyonian pankratiast Sostratus, who won his victories by breaking his opponent's fingers, or Arrhiolion, who even at the moment when he was being strangled to death forced his adversary to succumb by twisting his ankle out of its socket. Again in Philostratus' description of the wrestling Eroses, one of them tries to break the other's hold *στρεβλώσας ἓνα τῶν δακτύλων*.¹² In the Uffizi wrestling group the upper wrestler is twisting and forcing his opponent's arm across his back, and the same motive is represented on one of the groups of the frieze of Lysicrates' monument. At first sight we are apt to condemn such practices as barbarous and unsportsmanlike, but the principle of *στρεβλοῦν* or incapacitating an opponent by twisting any limb has been reduced to a science in Japanese wrestling. The same may be said of *ἄγχειν* or strangling, a method of finishing the contest much approved by the Eleans. The Tusculan Mosaic,¹³ to which I have already referred, shows us a wrestler who has leapt on to his opponent's back while the latter is still standing, and with his arms and legs twined round him tries to strangle him, a manœuvre also described by Philostratus in his account of the wrestling

⁹ *Meistertisch.* xvi. Other groups from the same vase are referred to, vol. xxv. p. 263, Fig. 5. There is no ground for Hartwig's suggestion that the vase represents *ἐκστρεφόμενος*, a term which will be discussed below.

¹⁰ Vol. xxv. p. 271, Fig. 26.

¹¹ *Gym.* 36. Cf. Terence, *Adelphi* 218.

¹² Paus. vi. 4, 2; Phil. *loc. cit.* ii. 6, l. 6.

¹³ *Mos. d. J.* vi., vii. 82; Schreiber, *Atlas*, xxii., 16.

Erotes. But though strangling played its part in the standing pankration or even in pure wrestling, the struggle on the ground offered far more facilities for it, and so the pankratiast required *τέχνη εἰς τὸ ἄλλοτε ἄλλως ἄγχειν*.

The use of hitting and kicking in the pankration can be best illustrated from the Panathenaic vases. Two of the latter figured in the *Monumenti*¹⁴ represent a wrestler who has seized his opponent's leg and is in the act of tilting him backwards. The vases have disappeared but their evidence is confirmed by the similar type on the Aspendus coins, while a curious parallel is again afforded by one of the Beni-Hassan groups.¹⁵ In the latter, however, and on the coins the wrestler standing on one leg tries to save himself by seizing his opponent's shoulders, on the vases he draws back his hand as though to strike him. I have before suggested that we have here a combination of kicking and hitting,¹⁶ and this suggestion is supported by two later representations in which the motive is unmistakable, another group from the Tuscullan Mosaic and a relief in the Louvre represent-



FIG. 2.—R-F. KYLIX, BERLIN. (After Hartwig, Fig. 12.)

ing the Genii of Sport.¹⁷ To these I should add the Lamberg amphora published in Vol. I. of this Journal, Pl. VI. which seems to represent the same combination of hitting and kicking. Somewhat later moments than that on the Lamberg amphora are represented by a Panathenaic amphora in the Louvre (F 278) where the right hand pankratiast is in the act of being knocked down by a blow on the face, and by the fragment of a Berlin kylix (Fig. 2) where he has actually fallen. This method of attack might be fitly described as *ἐνᾶλλεσθαι*.

In all the cases mentioned above we may notice that the fist is clenched, a fact which conclusively disproves the assumption that hitting with the fist was not allowed in the pankration. The only authority for such a statement is to be found in a single passage of Galen,¹⁸ which at the most

¹⁴ *Mon. d. I. I.* 21, 106 and 22, 86.

¹⁵ Reproduced in Rawlinson's *Herodotus*, vol. II. p. 329.

¹⁶ Vol. xxv. p. 28.

¹⁷ Reinach, *Épigraphie*, I. 75.

¹⁸ *De Motu Musc.* I. 8. εἰ δὲ ἑκαστος τῶν δακτύλων κώμπερ, τὸ σχῆμα τοῦ χειρὸς γίνετο μάλιστα τοῖς ἐν ταγκράτιῳ προσημασίαις αὐτῶν ὁμοίον. Cf. *Infra*, § F.

proves that the pankratiast did sometimes use his open hand, and certainly does not exclude the fist.

A second Panathenaic type is represented by two vases in the British Museum B 604, 610 (Pls. III., IV.). Here we have a conventional representation of boxing and wrestling. It is conventional because such attitudes can surely never have occurred in actual contest except with the most clumsy of performers, and can only be explained as an attempt on the part of the artist to combine in a single scene boxing and wrestling. The right hand pankratiast rushes in with his head down and allows his opponent to catch his throat in the bend of his left arm and pummel him with his right hand. In B 610 the latter lifts his fist to strike, in 604 the intention is not so clear; but in both the noticeable feature is the way in which his opponent has put himself into and remains in so hopeless a position.

D.—The Pankration on the Ground.

The struggle on the ground described variously as τὸ κάτω παγκράτιον, κύλισις, ἀλίνδῃσις must have been the really decisive part of the pankration. It was probably as long and as complicated as it is in the present day.

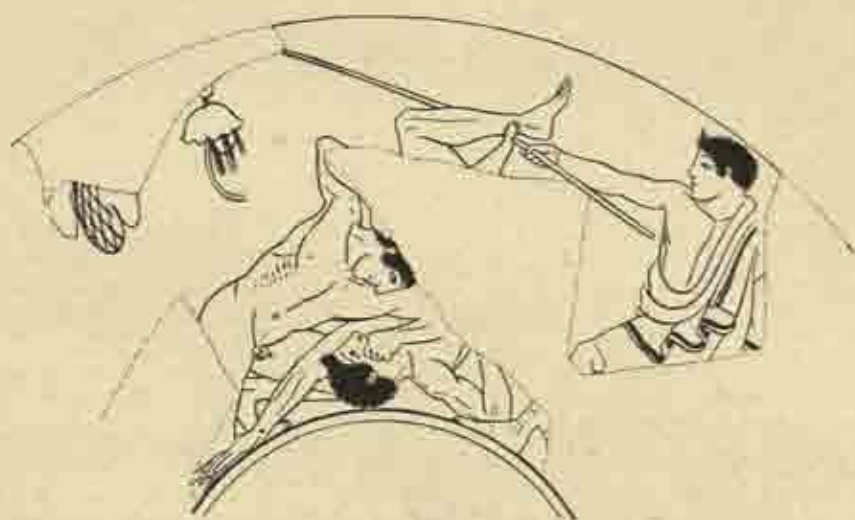


FIG. 3.—R.F. KYLIX. BALTIMORE. (After Hartwig, Pl. LXIV.)

the combatants sometimes sprawling at full length, sometimes on their knees, sometimes one on the top of the other as in the Uffizi group. It is this part of the pankration to which Plato objects and which leads him to exclude it from his ideal state as useless for military training because it did not teach men to keep on their feet.¹⁰ We may conjecture from this objection that in

¹⁰ *Leg.* 796, 834. Cf. Theodritus xiv. 112, 5 τ' εἰς γυμνασίου προκείμεναι | παναχχοῖ ἐξέουσιν σοφίσματα σύμφορα τέχνη.

Plato's time the pankratiast like the modern so-called Graeco-Roman wrestler was apt to neglect the preliminary contest and to go down on the ground at once. This grovelling would appear to have been a sign of the decay of these antagonistic sports which we know had set in before Plato's time; it must have been unknown to Pindar, who emphasizes the importance of boxing in the pankration.

It is generally stated that hitting was not allowed when the opponents were on the ground. That it was not of general use is true because it was less effective than other means of ending the contest; but the gratuitous statement that it was not allowed is based solely on our modern idea of not hitting a man when he is down, and it is disproved by the evidence of the vases. In the Baltimore kylix (Fig. 3) a pankratiast having thrown his opponent over his head kneels over him holding him down with his left hand and lifting his right to strike. The official interferes apparently



FIG. 4.—WRESTLING GROUPS ON GRAECO-ROMAN GEMS IN B.M.

to stop the contest, but if any breach of the rules is intended, it consists probably not in hitting an opponent who is down, but in forcing the hand into his mouth, which may well come under the head of *ôpûrrev*. The same type occurs, however, on other vases where the one opponent is either fallen or falling (Fig. 2), and especially on some of the Antaeus vases, the motives of which are all taken from the palaestra.⁵⁰ We may notice particularly that the moment illustrated is precisely that when hitting would be most effective, when Antaeus has just fallen or is in the act of falling (Pl. V). The Uffizi group is useless as evidence owing to the uncertainty as to the restoration of the right arm of the upper figure.

Ground wrestling is seldom represented in art except in certain

⁵⁰ *B.M. Vases* B 196, 322; *Annali*, 1878 n; Millingen, Pl. XXXI.; Klein, *Elephentia*, p. 122 c. f. k. D.

mythological types: it did not lend itself readily to palaestra scenes in which most of the figures are upright. We learn from Lucian's *Asinus*, that its various movements were taught systematically in the same way as those of ἀρθή πάλη. He mentions particularly τὰ ἀπὸ γονάτων.²¹ Groups of this kneeling type though not occurring on the vases are frequent on later gems, being particularly suitable for oblong and oval spaces, but from this class of monument we can derive little detailed information. The examples represented from gems in the British Museum explain themselves (Fig. 4).

The sprawling type is associated chiefly with the struggles of Heracles with the lion and with Antaeus. In the case of the lion Heracles forces its head down and tries to strangle it.²² Antaeus has usually been thrown by a neckhold, and is trying to support himself with his right hand while Heracles with both arms fastened round his neck strives to force him to the ground.²³

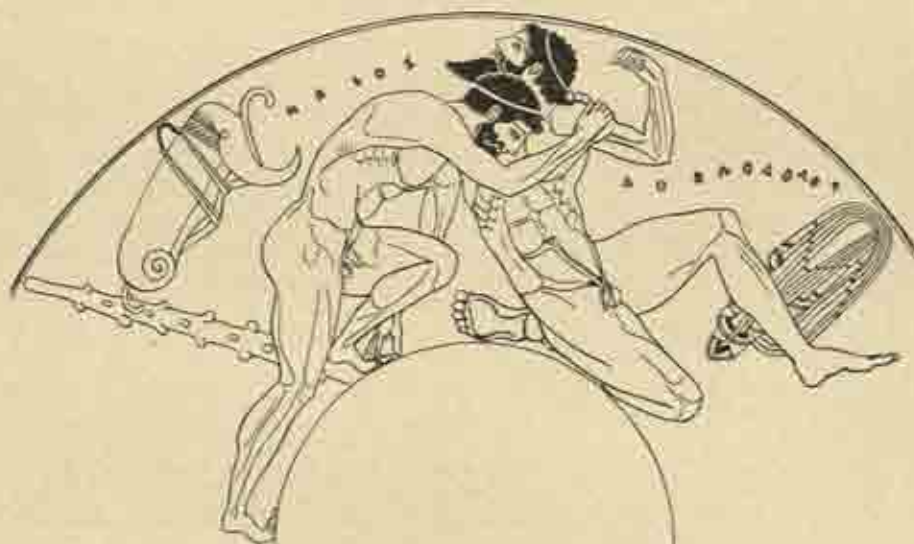


FIG. 5.—R.F. KXLIX. (FROM *J.H.S.* x. PL. I.)

(Fig. 5), a curious rendering of the scene, had the story that Antaeus derived fresh strength from earth existed in the sixth and fifth centuries. The kylix published in the *Arch. Zeit.* actually represents Heracles throttling his opponent. Antaeus has been forced on to his back in the manner described above or possibly thrown by the flying mare, and Heracles leaning over him with his right hand plus his right arm to the ground, and with his left hand grips him by the throat.

Another interesting type afforded by Heracles' contests with the Triton and Achelous will be discussed in connexion with ἀλμακισμός.

²¹ Cf. Aristoph. *Pax* 895—

ἐνὶ γῆς παλάμῃ, τετραποδῶδ' ἐστάναι,
πλάγιον καταβάλλειν, ἐς γόνατα κέβη' ἐκείνου.

²² *R.M. Vases* B 159, 199, 217, 301, etc., v.

H. B. Walton, *Introduction to R.M. Vases*, II. p. 14; *Görh. d.F.* 189, 185.

²³ Klein, *loc. cit.* A; *J.H.S.* x. Pl. I; *Arch. Zeit.* 1891, Pl. CXLIX.

E.—*The alleged Brutality of the Pankration.*

It has been the fashion to treat the pankration as a contest of brute force and to contrast the ideal pankratiast Heracles and the ideal wrestler Theseus as the representatives of force and skill respectively. The comparison is unfair to the pankration and to Heracles.²⁴ The pankration is essentially a contest of skill, and there is no ground for so contrasting Heracles and Theseus. The invention of the pankration is ascribed to both heroes alike. According to Bacchylides, Heracles employed this method of fighting against the Nemean lion,²⁵ and vanquished the latter, not by brute force but by all manner of skill. Another tradition tells us that Theseus was the inventor of the pankration, employing it against the Minotaur.²⁶ Both Heracles and Theseus were represented as the types of science as opposed to force in their contests with Antaeus and Cereyon.²⁷ A comparison of two passages written at very different periods will make both points plain. To Pindar the pankration was a contest of skill and Heracles was its noblest representative. But what is his idea of Heracles? Not the cumbersome giant of later art, but a man 'of short stature, and of unbending soul.' And of Melissus whom Pindar compares to Heracles we are told 'not of the stature of Orion was this man, but his presence is contemptible; yet terrible is he to grapple with in his strength,' and he owes his victory 'not only to the spirit of a lion, but to the sleight of the fox.'²⁸

Philostratus writing seven centuries later has the same ideal. To him too Heracles is not the overdeveloped monstrosity of later times, but *λαχρὸς καὶ τέχνης ἐμπλεὺς δι' ἐναρμυστίαν τοῦ σώματος*.²⁹ Heracles is indeed of stature beyond that of mortal man: but such stature is not regarded by Philostratus as essential to the pankratiast. I have already alluded to Philostratus' account of those pankratiasts whom he calls *οἱ ἐν μικρῷ μεγάλοι*. He gives us an excellent illustration of such a pankratiast in his story of the Cilician who on account of his smallness of stature was nicknamed 'Halter,' or the 'Dumb-bell.'³⁰ Whether the ideas of Philostratus corresponded to the practice of his own day may be doubted: the object of his treatise on gymnastics is to revive the purer and more skilful athletics of the past. At all events his evidence is a valuable confirmation of what Pindar tells us both of the pankration and of Heracles.

The injuries inflicted in the pankration have been much exaggerated. Fatal accidents did occur as in the case of Arrhichion, but they were very rare, rarer apparently than in Greek or in modern boxing. The Anthology presents

²⁴ In my earlier articles, written before I had studied the pankration, I have fallen into the same mistake.

²⁵ xiii.

²⁶ Schol. Pindar, *Nem.* v. 49.

²⁷ It is true that on the vase the exploits of Heracles are not characterized by the grace

which marks those of Theseus. The reason is that the exploits of Heracles belong for the most part to the black-figured, those of Theseus to the red-figured period.

²⁸ *Isth.* iii.

²⁹ *Im.* ii. 21.

³⁰ *Herois*, 54, p. 673.

us with a gruesome array of the injuries inflicted by the hard and heavy boxing thongs,²¹ but we hear nothing of the injuries inflicted in the pankration. Indeed we are expressly told by Artemidorus²² that the pankration differed from boxing in being less dangerous, and this statement is borne out by the story told by Pausanias that Cleitomachus being a competitor on the same day in the pankration and in boxing asked the Hellanodikai to put the pankration first before he had been wounded in the boxing.²³ For the so-called pankratiast's ear I can find no authority whatsoever. We frequently hear of the boxer's injured ear, and the crushed ear is regarded as the sign of an athlete.²⁴ But though it may have been sometimes caused by a blow, it may quite as well have been due to wrestling, to which Philostratus²⁵ expressly attributes it. It appears to have been precisely similar to the swollen ear so familiar to the Rugby footballer some years ago, and the ear-cap which the modern forward wears is identical with the ἀμφοτίδες worn by the Greek wrestler.

The pankration must not be held responsible for all the evils for which Galen and later medical writers condemn it and which it shared with boxing and wrestling. Such sports when they become a profession have always a degrading influence and the evil effects were increased in Greece by the utterly unscientific system of training introduced by professionalism, a life of over-feeding, over-sleeping, over-exercise, the coarsening effects of which on body and on mind we can still trace in later art. In the case of boxing we can see how the sport itself degenerated and became more brutal and less scientific. But these evils are due not to the sport but to the abuse of it. What the pankration was at its best we can learn from Pindar²⁶ and even in Xenophon when the evil had already begun we find the charming picture of the boy pankratiast Autolyceus. The closest parallel to the pankration, the Japanese Jujitsu, is certainly neither unscientific nor as practised by the Japanese brutal.

F.—ἀκροχειρισμός, ἀκροχείρισιν, ἀκροχειρίζειν.

Ἀκροχειρισμός is explained by Liddell and Scott as a kind of wrestling in which the opponents grasped one another's hands without clasping the body (συμπλοκή), and most modern books of reference agree in regarding it as some form of wrestling. Krause interprets it as the exercise familiar to every schoolboy in which two opponents clasp one another by the fingers and

²¹ *Anth. Pal.* xi. 75, 76, 77, 78, 81.

²² *Onir.* i. 84 τὸ δὲ πᾶν κακώτερον τὰ αὐτὰ τῇ πομπῇ σημαίνει πλὴν βλάβης.

²³ *Paus.* vi. 15, 5. Cf. the story of Theagenes and Euthymus, *ib.* vi. 6, 5.

²⁴ ἀκρότατος, ἀκροθλαδίας, are used as epithets of athletes (*Lucian, Luciphr.* 9, *Diogen. Laert.* v. 67). Cf. *Theocrit.* xxii. 45, *Plat. Gorg.* 515 E, *Protag.* 342 A.

²⁵ *Herod.* 180, τὰ δὲ δὴν εὐκαταῖς ἢν ἀνὴρ ἐκὼς πύλει.

²⁶ Eight of his odes are in honour of pankratiasts, and from them can be illustrated every feature of Pindar's athletic ideal—strength, beauty, training, skill, courage, and endurance, while over all preside the fair-haired graces 'who give and grace victory.'

test their strength. This he says was a special trick of the pankration. But though we do hear of a wrestler or pankratiast securing victory by breaking his opponent's fingers,³⁷ the position described by Krause could not occur in a real contest.

The explanations given above are based solely on Pausanias' story of Acrochorsites and entirely neglect the much more accurate definition of Suidas.³⁸ ἀκροχειρισμός has properly speaking nothing to do with wrestling; it belongs to boxing, and to the pankration only so far as boxing formed part of the pankration. Plato in his Alcibiades distinguishes προπαλαίειν and ἀκροχειρίζεσθαι.³⁹ The same distinction is found in Lucian, who also in another passage definitely explains ἀκροχειρισάμενοι by the words καὶ παΐσαντες καὶ παισθέντες ἐν τῷ μέρει.⁴⁰ But ἀκροχειρίζεσθαι is not quite the same as πυκτεύειν. It implies that the hand is extended, not clenched nor bound with any form of ἰμάς or caestus. It means 'to spar' and is properly used not of the actual contest but of practice. Thus Aristotle⁴¹ as an instance of injury inflicted involuntarily quotes the case of a man who in demonstrating to another how to deliver a blow like οἱ ἀκροχειριζόμενοι accidentally deals him a serious blow. Philostratus in his rules for training lays down the principle that athletes who have over-eaten themselves—a practice for which the professional strong man was notorious in later times and which was indeed encouraged by trainers—must be strictly moderate in exercise. For example he says πύκται ἀκροχειρίζεσθων ἐλαφροὶ τε καὶ ἀερίζοντες.⁴² And in Athenaeus we find the similar combination σκιαμαχοῦσι καὶ πρὸς ἀλλήλους ἀκροχειρίζονται ἀερίζειν, σκιαμαχεῖν⁴³ mean to beat the air, fight with an imaginary opponent, and ἀκροχειρίζεσθαι means to spar lightly with an opponent for practice and exercise. Sometimes a bag filled with sand called the κώρυκος was used in the same way as the modern punchball, a light one by boxers, a heavier one by pankratiasts.⁴⁴ These various forms of exercise are classed together by Hippocrates as means of hardening the body and removing superfluous flesh ἀκροχειρίξ ἰσχυαίνει καὶ τὰς σάρκας ἔλαττει ἀνω καὶ κωρυκομαχία καὶ χειρονομία τὰ παραπλήσια διαπρήσσεται.⁴⁵

The training of the pankratiast would naturally be partly the same as the boxer's, but in his case ἀκροχειρισμός appears to be used not merely of practice, but of the actual contest. Philostratus after describing the wrestler says καὶ παγκρατιάσει γὰρ ὁ ταυότος τὸ κάτω παγκράτιον ἀκροχειριεῖται τε οὐχ ἥσσον.⁴⁶ We have seen that the use of the fist was certainly not forbidden in

³⁷ Paus. vi. 4, 1. Cf. vol. xiv. of this *Journal*, p. 271.

³⁸ πυκτεύειν δὲ παγκρατιάσει πρὸς ἄλλον ἕκαστο σωματικῶς ἢ ἔλατται ταῖς ἀρμαῖς μὲν ἄλλος γυνώσκεισθαι.

³⁹ *Alcibi.* i. 107 f.

⁴⁰ *Lexiphan.* 5; *De Salt.* 10.

⁴¹ *Nic. Eth.* iii. 1. The v.l. εἶται βουλάμενος adopted by Bywater for the usual εἶται βουλάμενος would suit my argument still better.

⁴² *Gym.* 50.

⁴³ *Athen.* xiv. Another word of similar meaning is χειρονομία. So the statue of Glaucon represented him σκιαμαχοῦντος (Paus. vi. 10, 3), and Lucian describes an athlete practising as λακτίζοντα εἰς τὸν ἀέρα ἢ εἰς κενὴν πλῆρη τινα καταφέροντα ὡς τὸ ἀνταγωνιστὴν εἶδεν παλόντα (*Hermotim.* 33).

⁴⁴ *Phil. Gym.* 57.

⁴⁵ *De Diet.* ii. p. 361, l. 16 (Fornius); cp. 374, 3.

⁴⁶ *Op. cū.* 38.

the pankration. At the same time one can understand that in a contest combining wrestling and boxing there is an advantage in striking with the open hand so as to be able to secure a grip without delay and also to avoid injuring the knuckles. A good illustration of such fighting is afforded by a fragment of a r.f. kylix in Berlin⁴¹ (Fig. 2) on which we see a fallen pankratiast bleeding at the nose and bearing on his back the full imprint of his opponent's hand. The latter is leaping on him with one hand grasping his arm, the other hand drawn back to strike. A possible reminiscence of the word occurs in Nonnus' description of the struggle between Aristaeus and Aeacus, ἄρματι χειρῶν ἀροτάτῳ σφίγγαντες.⁴² We can see then how appropriate the term is to describe the preliminary sparring in the pankration. In boxing there can have been little sparring after the introduction of the heavy caestus, and therefore the word ἀροχέρισμός which does not occur before the fourth century is confined to the training school.

G.—κλιμακισμός, κλιμακίζειν, διακλιμακίζειν.

The lexicographers give the usual stereotyped explanations of this term παράγειν καὶ διαστρέφειν, σκελίζειν καὶ διαστρέφειν.⁴³ The true explan-

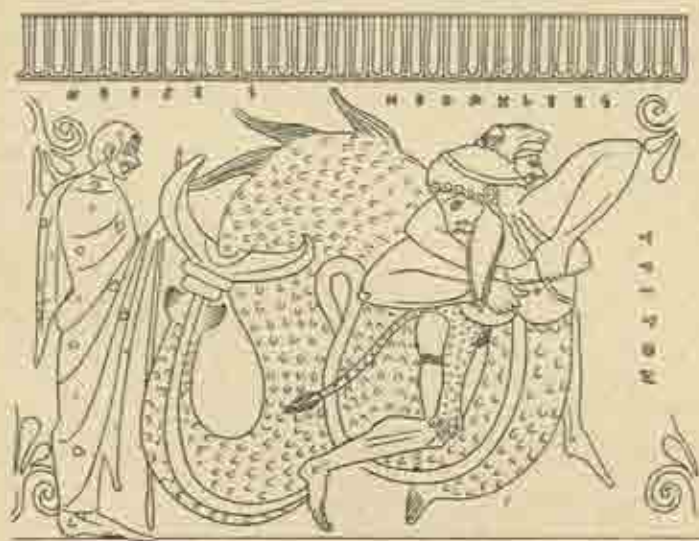


FIG. 6.—HERACLES AND TRITON. R.F. AMPHORA IN B.M. B. 223.

ation was suggested long ago by Hermann in connexion with the chorus in Sophocles' *Trachiniae* 497-530 describing the contest between Heracles and Achelous, and a comparison of the monuments leaves no doubt as to the

⁴¹ Hartwig, Fig. 12.

⁴² *Dionys.* xxvii. 560.

⁴³ Suidas, Photius, *Etym. Mag.*

correctness of Hermann's interpretation. *κλιμακίζειν* means to jump on to an opponent's back knotting one's legs and arms about him—to make as it were a ladder of him. The cognate word *κλιμακίς* is used similarly of a woman who makes a ladder of herself by allowing some one to climb upon her back.

Sophocles describes the struggle between Heracles and Achelous as an athletic contest. It was the pankration *πάμπληκτα παγκόνιτα τ' ἀεθλ' ἀγώνων*, and Kypris stood by as umpire holding the rod, *ράβδονόμει*,

τότ' ἦν χερὸς, ἦν δὲ τόξων πάταγος
ταυρείων τ' ἀνάμιγδα κεράτων
ἦν δ' ἀμφίπλεκτοι
κλίμακες, ἦν δὲ μετώπων ὀλόεντα
πληγματα καὶ στόνος ἀμφυῖν.

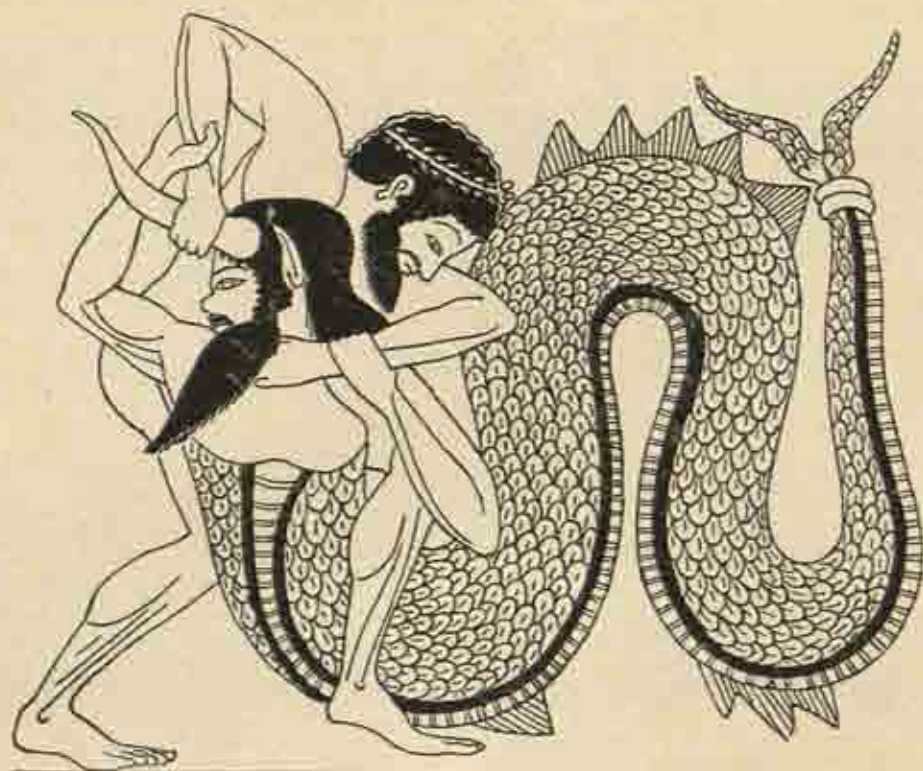


FIG. 7.—HERACLES AND ACHELOUS. R.-F. STAMNOS. B.M. E 437. (Gerh. A.V. 115.)

Every detail in this passage recalls the representations of the contest on the vases, in the light of which the *τόξων πάταγος* becomes at once intelligible. Heracles has his bow still slung across his shoulders and the 'clatter of the bow' mingles quite naturally with the 'clatter of fists and horns' in the scene depicted on Fig. 8.

The scholiast commenting on *ἀμφίπλεκτοι κλίμακες* says *ἐπαναβάσεις*

παρὰ ἄνω τε καὶ κάτω αὐτοὺς στρέφειν ἐν τῇ μάχῃ, τοῦτο δὲ τὸ σχῆμα Ἡρακλέους ἀκουστέον. The scholiast is right: κλιμακισμός does mean mounting on an opponent's back and this type is associated in art with Heracles in his contests with various monsters. A very favourite subject in early art was Heracles wrestling with the fish-tailed Triton. We find it on island gems, on bronzes from Olympia, in the pediments of the temple of Assos, in the archaic pediments from the Acropolis,⁴⁰ and on numerous black-figured vases (Fig. 6).⁴¹ Heracles attacks the Triton from behind and knots his arms round his neck: in the pediments where the group fills the angle space he sprawls beside the Triton, on the more ample vase spaces he is always



FIG. 8.—HERACLES AND ACHELOUS. E-F. HYDRIA. B.M. B 313. (Ox. Arch.)

represented astride the Triton who vainly strives to loosen his grip. On a r.-f. stamnos in the British Museum E 437 by Pamphaeus (Fig. 7) we find the same type adapted to the contest with Achelous, who differs only from the Triton in the addition of the horn. This vase is, however, exceptional, Achelous usually being represented as a bull with a human head or body, while Heracles attacks him either in front or from behind and seizes his horn. Here too the motive is taken from the pankration or wrestling. On a b.-f. amphora in the Louvre,⁴² Achelous, who is here represented centaur-like with a man's body growing out of a bull's, seizes with his hand Heracles' left foot, an adaptation of the Antaeus type; on a b.-f. amphora and a hydria, both in the

⁴⁰ E. A. Gardner, *Greek Sculpture*, pp. 63, 494; Gerh. *A.F.* 111, 112, 159.

⁴² *Arch. Zeit.* 1862, PL. CLXVII.

⁴¹ *B.M. Passes* B 201, 223, 224, 311, 312, 493.

British Museum B 228, 313 (Fig. 8),⁵² we have, I think, a reminiscence of the Triton type. Heracles has seized Achelous by the horn and by the beard: Achelous has been forced on to his knees and Heracles raises his left leg in order to mount astride him. It is by the same means that Theocritus represents Heracles killing the Nemean lion,⁵³ though the artistic type is not as far as I know employed for this contest.

We see then that the explanation of the scholiast is supported by the evidence of an artistic type with which Sophocles must have been familiar. Heracles is represented constantly as 'mounting' on the Triton, and sometimes on Achelous. The motive, as we see from the literary and artistic evidence, is borrowed from the palaestra, and its identification with κλίμαξ is confirmed by the elaborate description of it in the account of Heracles and Achelous by Ovid,⁵⁴ who faithfully preserves the old literary and artistic tradition.

Further evidence is supplied by a line of Plato Comicus, Πρεσβ. 2. χαίρεις αὐτὸν μεταπεττεύσας καὶ διακλιμακίσας. To execute the κλίμαξ it was necessary to get behind one's opponent either by turning him round μεταβιβάζειν,⁵⁵ or by springing round him. μεταπεττεύειν, to move a draughtsman, is an obviously appropriate variation for μεταβιβάζειν, and διακλιμακίζειν is merely a strengthened form of κλιμακίζειν perhaps denoting the success of the movement, just as διαπαλαίειν means to wrestle successfully, or throw. The other method is clearly described by Lucian in *Anacharsis* 31. Anacharsis draws a humorous picture of the Greeks advancing to meet an enemy's attack like boxers with clenched fists. 'And the enemy,' he says, 'naturally cower before you and take to flight for fear lest, as they stand gaping, you fill their mouths with sand, or περιπηδήσαντες ὡς κατὰ νότον γέννησθε, περιπλέξητε αὐτοῖς τὰ σκέλη περὶ τὴν γαστέρα καὶ διάγχητε ὑπὸ τὸ κράνος ὑποβαλόντες τὸν πῆχυν.'

The κλιμακισμός may be used when the opponent is standing or when he is already on the ground, but both varieties belong to the pankration and not to ὀρθή πάλη. For it is impossible to throw an opponent in this way without falling oneself, and in the standing type as well as on the ground throttling is employed to force him to yield. The standing type is described by Philostratus in his picture of the wrestling Erotes⁵⁷ ὁ μὲν ἤρκε τὸν ἀντίπαλον περιπιάς αὐτῷ κατὰ τῶν νώτων καὶ ἐς πρὶν γὰρ ἀπολαμβάνει καὶ καταδεῖ τοῖς σκέλεσιν, ὁ δὲ οὔτε ἀπαγορεύει καὶ ὀρθὸς ὑπανίσταται καὶ διαλύει τὴν χεῖρα ὑφ' ἧς ἄγχεται στρεβλώσας ἕνα τῶν δακτύλων, μεθ' ἧν οὐκέτι οἱ λοιποὶ ἔχουσιν οὐδὲ εἰσὶν ἐν τῷ ἀπρίξ, ἀλγεῖ δὲ ὁ στρεβλούμενος καὶ κατεσθίει τοῦ παλαιστοῦ τὸ οὖν· ὅθεν δυσχεραίνουσιν οἱ θεῶμενοι τῶν ἐρώτων ὡς ἀδικοῦντι καὶ ἐκπαλαίοντι. The type on the ground is described by Lucian in the first chapter of the *Anacharsis*, and at greater length by Heliodorus.⁵⁸ Both

⁵² *Arch. Zeit.* 1885, Pl. VI; *Ges. Arch.* 1875,

Pl. XX.

⁵³ *xx.* 266 ff.

⁵⁴ *Met.* ix. 83 ff., especially 51, 52. Cf. Lucian, *Phars.* iv. 824; Statius, *Theb.* 900.

⁵⁵ Cf. vol. xxv. of this *Journal*, p. 287.

⁵⁶ *Iu.* i. 6, 12.

⁵⁷ *Ascl.* i. 31, 32 quoted in full by Krause, *op. cit.* p. 912.

types occur on the Tusculan Mosaic to which reference has been made; in both cases we see the attack made from behind, the legs turned round the opponent's body and the arms round his neck.

Very similar is the Uffizi wrestling group, of which according to Hans Lucas the Mosaic group is a reminiscence. In the marble, however, the uppermost wrestler is not throttling his opponent and cannot have been so represented whether the present restoration of his right arm is correct or not. It is presumptuous to give an opinion without having seen the original, but so far as I can judge from photographs and casts I see no reason to doubt the general correctness of the restoration. The fallen wrestler is supporting himself on his left arm, and his opponent's immediate object is to break down that support. This could be effected by a blow. For the underneath wrestler's right arm being secured he can only guard his head with his left. The description in Heliodorus is to the point. Theagenes having forced the Aethiopian champion on to his knees twines his legs round him and then knocking away his wrists *ἐκκρουσάμενος τοὺς καρπούς οἷς ἐπερείδομενος ὁ Αἰθίοψ ἀνείχε τὰ στέφρα* and knotting his arms round his head he forces him down on his stomach to the ground. While a wrestler is supporting himself on his hands and knees his position is far from hopeless, and he can by a quick and vigorous movement often overturn his adversary and secure the advantage. Such is the moment selected by the sculptor of the Uffizi marbles: the victory is still undecided, the uppermost wrestler is anxious to make sure of his victory, the other is eagerly watching to take advantage of any carelessness on the part of his opponent and reverse matters. The situation can be illustrated by Philostratus' account of the death of Arrhichion. Arrhichion is being strangled by his opponent who is on the top with arms and legs entwined round him; but even as he is expiring he takes advantage of a moment's relaxation of the grip to kick his right leg free, and rolling over so as to crush his opponent's left side he seizes his right foot and twists it out of its socket with such violence as to force him to yield and so even with his last breath he secures the victory.⁴⁵

The term *πλίγμα* preserved by Hesychius is apparently another name for *κλιμαξιμός*. He defines it as *βῆμα ἀπὸ τῶν κυλισμένων καὶ παλαιόντων ὅταν παραβάντες τοῖς σκέλεσι κατέχωσιν*.

H.—ἀποπτερυίζειν, πτερυίζειν.

The trick by which Arrhichion secured his victory appears to have been similar to that known as *τὸ ἀποπτερυίζειν*, the invention of which Philostratus assigns to the Cilician pankratiast nicknamed, for the smallness of his stature, Halter.⁴⁶ The latter, on his way to compete at Delphi, stopped at the shrine of the hero Protesilaus, to consult him and ask how he could vanquish his opponents. The hero replied *πατούμενος*. He was disconcerted

⁴⁵ *Iw.* ii. 6. Cf. *Paus.* viii. 40, 2.

⁴⁶ *Herac.* 53, 54.

at first by such an answer, but being a man of invention he devised τὸ ἀποπτερινίζειν, understanding that the advice of Protesilaus was μὴ μεθίσθαι τοῦ ποδὸς τὸν γὰρ προσπαλαίοντα τῇ πτέρῃ πατείσθαι τε ξυνεχῶς χρῆ καὶ ὑποκείσθαι τῷ ἀντιπάλῳ. By this means he acquired renown and was never defeated. We have seen already that Philostratus enumerates among the methods of the pankratiast σφυρῶ προσπαλαίειν. In the LXX. πτερινίζω is used of Jacob supplanting Esau, and in the account of the birth of the twins we read ἔλαβε τῆς πτέρης.⁶¹ Suidas explains the verb as ἀπατᾷ ἢ λακτίζει, and Liddell and Scott translate it accordingly in the passage of Philostratus quoted above 'to kick off with the heel.' One can only suppose that they took the translation on trust and did not verify the reference. For Philostratus leaves no possible doubt as to the true meaning, 'to seize by the heel and so throw.' This meaning is required by every passage quoted and is in agreement with a further note in Suidas πτέρνα—ὁ δόλος καὶ πτερινίζω τὸ καταβάλλω. We have seen how Antaeus grabs at the foot of Heracles and how in doing so he is forced on to his knees. Antaeus represents clumsy untrained brute force. In the hands of a strong and active adversary the attack is far more dangerous and any one who has seen Japanese wrestle will understand something of grips in which victory may be secured by falling, συμπλοκῶν ἐν αἷς περιγίγνέσθαι χρῆ οἷοι πίπτοντα.

I.—ὑπτιασμοί.

The last two sections will help us to understand these συμπλοκαί and the ὑπτιασμοί mentioned by Philostratus. ὑπτιασμός means 'falling backwards.' A favourite Japanese throw is the stomach throw. A wrestler seizes his opponent by the shoulders or arms and throws himself backwards at the same time planting his foot in the other's stomach and thus throwing him heavily clean over his head while he himself falls lightly. The throw was known to the Egyptians, being represented on the tombs of Beni-Hassan. It is accurately described by Dio Cassius⁶² in his account of a battle between the Romans and the Iazyges: 'whenever any of them fell backwards he would drag his opponent after him and with his feet hurl him backwards as in wrestling.' A similar method of defence is suggested by Pindar's description of Melissos in the third Isthmian ode. 'In craft he is as the fox that spreadeth out her feet and preventeth the swoop of the eagle.'⁶³ This clearly denotes some form of ὑπτιασμός, and once more Antaeus affords us an example of the failure of this means of defence and of that described in the last section. A b.-f. hydria in Munich⁶⁴ represents him lying on his back with his right hand grasping Heracles' left foot and his left leg kicking him in the stomach. But in vain. Heracles has seized his uplifted leg with his

⁶¹ Gen. xxxv. 26, xxv. 25.

⁶² lxxl. 7: ἀλλ' εἴθ' ὑπὸ τοῖς πόσιν ἔσπευ, συνεφέλλετο τὸν ἀντίπαλον καὶ τοῖς ποσίν ἐκ τοῦ σώματος ἀνερρίπτεται ὥσπερ ἐν πάλῳ.

⁶³ l. 73: μῆτιν δ' ἀλώμεν.

αἰετῶ δ' ἑ' ἀνκενταμένη βούβων ἰσχει.

⁶⁴ Jahn, 114; Arch. Zeit. 1878, x.

left hand and his head with the right, and forces leg and head together. The only other example that I know of such a position is a bronze, figured by Montfaucon,⁶⁶ representing a wrestler fallen on his back apparently

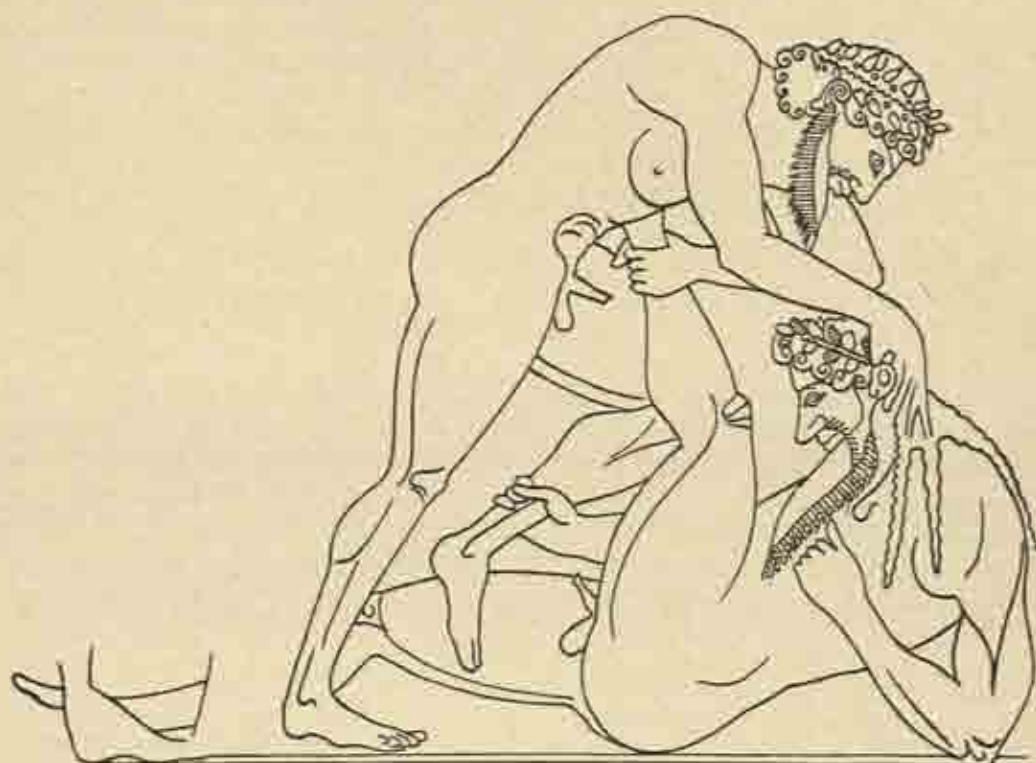


FIG. 9.—B. P. HYDRIA. MUNICH.

kicking his opponent in the face, but I have failed to discover any further details of this group.

J.—Technical Terms of Doubtful Meaning.

It remains briefly to mention certain technical terms known to us for the most part only from lexicographers. Without further examples of their use any explanation that can be offered is merely provisional.

ἀγκυλίξειν (Pollux). Hesychius defines *ἀγκύλη* as *ἡ τοῦ ἀγκῶνος καμπή* and Grasberger therefore explains *ἀγκυλίξειν* as seizing an opponent's neck in the bend of the arm. Another explanation is suggested by the scholiast to Homer, *Iliad* xxiii. 726, *ἐκραυσεν αὐτοῦ, φησὶν, ἐπιτυχῶν ὅπιθεν τὴν ἰγνύην ἣτις καὶ ἀγκύλη καλεῖται*. Philostratus *Im.* ii. 6. 62 uses *ἀγκύλη* in the same way. *ἀγκυλίξειν* might therefore mean to 'ham' or strike behind the knee.

⁶⁶ *Ant. Expl.* iii. 166, 2; Reinach's *Repertoire*, ii. 538, 6.

ἀγκυλίζειν (Pollux), according to Krause = ἀγκυλίζειν, according to Graeber to drive one's elbow into an opponent's ribs, a trick of doubtful utility in wrestling. Perhaps on the analogy of other wrestling terms it might mean to seize an opponent by the elbow, a grip often represented.

ἀπάγειν (Pollux), meaning unknown.

παράκρουειν (*Et. Mag.*) παρακρούεται = ἀπατᾷ ἀπὸ μεταφορᾶς τῶν παλαιστῶν οὐ καταβαλλόντων ἀλλ' ἐν ὥρᾳ παρακρούοντων ἢ ποδὶ ἢ χειρὶ καὶ οὐ ῥιπτόντων. It means therefore to deceive an opponent by feinting either with hand or foot. Similarly a wrestler may by a false movement of his own lose his balance, and so Plato describes the errors into which a dialectician falls as σφάλματα ἃ ὑφ' ἑαυτοῦ παρακρούσται (*Theaet.* 168 A).

πλάγιάζειν (Pollux) usually interpreted as παρακρούειν. Perhaps used in its natural sense 'to turn or throw sideways.' Thus Eustathius 1327. 8 R commenting on the Homeric wrestling match says πλάγμαι πίπτουσιν.

Other technical terms occur in the Oxyrhynchus papyrus iii. 406. The papyrus consists of three columns of which two have been published. The first is so much mutilated as to defy interpretation; it is marked like the second column by the repetition of the command πλέξον varied by βεῖψον which does not occur in the second column. The latter is much better preserved and I have in previous articles suggested interpretations of certain portions of it. I have been unable to form any consistent idea of the movements described in lines 21-27 and I have therefore appended the whole text in the hope that some one more experienced may be tempted to suggest a solution.

- παράθες τὸ μέσον· καὶ ἐκ κε-
φαλῆς τῇ δεξιᾷ πλέξον
σὺ περίθες· σὺ ὑπ' αὐτὴν ὑπὸ-
20 λαβε· σὺ διαβάς πλέξον
σὺ ὑπόβαλε τὴν δεξιάν [·σ]ὺ
εἰς δ' ὑποβάλλει περιθ[ε]ις
κατὰ πλευροῦ τὸν εὐ[ώ]ρυ-
μον βάλε· σὺ ἀπόβαλε τῇ εὐ-
25 ωνόμῃ· σὺ αὐτὸν μεταβάς
πλέξον· σὺ μεταβαλοῦ· σὺ κα-
τὰ τῶν δύο πλέξον
σὺ βάλε πόδα· σὺ διαλάβ[ε]· σὺ εἰ
πιβάς ἀνάκλα· σὺ προστ[άς]
30 ἀνάγνε καὶ εἰς αὐτοῦ . . .
λον καὶ αὐτὸν ἀντιβλ[ε] . . .]

My thanks are due to Mr. Cecil Smith for permission to publish various vases in the British Museum, and also to Mr. H. B. Walters for constant assistance and advice, particularly with regard to the mythological types.

E. NORMAN GARDINER.

POEMANENUM.

[PLATE VI.]

THE site of Poemanenum is a vexed question in Mysian topography, on which no clinching evidence is as yet forthcoming: it is important for its bearing (*a*) on the Roman road-system, and especially on Aristides' routes, and (*b*) on the geography of the Byzantine wars. The position of the place may thus be deduced from two sets of data relating respectively to the Roman road-post and to the Byzantine fortress: those who work from road-evidence alone tend to place the site either on the Aeseper at Günen, or, more vaguely, in the Taraius valley: those who lay stress on the Byzantine evidence point inevitably to Eski Manyas, a village some few miles south of the lake of the same name.

The claims of Eski Manyas to the Byzantine site appear to me incontestable:¹ to put quite briefly what has often been discussed at length, we have here remains of the strongest Byzantine castle in the district, in a position corresponding to what we know of Poemanenum; and, besides this, an echo of the ancient name is evidently preserved.²

I venture to differ, however, from Dr. Wiegand as to the importance of Eski Manyas as a natural road centre: its direct communication with the plain of Balukiser is a little used horse-track, while, of the two high-roads which intersect at Manyas on Dr. Wiegand's map, the Pergamon-Cyzicus would pass more expeditiously west of the lake, while his ἀρχαία βασιλεία, as the later route given by Hadji-Khalifa³ shews, need never rise so far into the hills. If this reasoning be correct, Manyas was the Byzantine site, and the Roman lay elsewhere.

Such a theory has nothing in itself improbable: the territory of the Poemaneni marched with that of Miletropolis on the east,⁴ and may well have extended to the Aeseper on the west: there is thus ample room for a

¹ The identification was first made by Hamilton (ii. 105): for descriptions of the site see also A. D. Mordtmann in *Asiatik* 1855, 557; A. Sevin Darginy in *Rev. Arch.* xxiv, 102 ff.; J. A. B. Munro in *Geog. Journ.* 1897, 160; and Th. Wiegand in *Alt. Mitt.* xxix. 282. Le Bas placed Poemanenum, fortress and village, near Kestelek (*Rev. Philol.* i. 211-218, cf. V. de St. Martin in *Nouvelles Annales des*

Voyages, 1845, ii. 139-40).

² Cf. especially a form Πομανίον which occurs in several episcopal lists.

³ *Trav. Norberg*, ii. 530. The road passed from Uludağ bridge by Salyr to Körpeagatch.

⁴ A boundary stone was found at Mihallitch (*Alt. Mitt.* xiv. 247, *J.H.S.* xvii. 271, 13, cf. *ib.* xxiv. 24).

second site, while the transfer of population to better protected positions in troublous times is a common phenomenon.

The evidence of Stephanus is wholly in our favour: he describes Poemanenum as (1) πόλις ἥτοι φρούριον ἔστι δὲ καὶ (2) χωρίον τῆς Κυζίκου, the (Byzantine) fortress and the (Roman) village on the road.

The Peutinger Table, to turn to the road evidence, places *Phemonia* between Cyzicus and Argiza (Balıa Bazar, on the upper Aesepus)⁸ on the road to Pergamon. This statement taken alone has led to the theory that Poemanenum was at Gunen (on the lower Aesepus), and an inscription from the latter has been restored with the name Π[ημ[αν]ηνῶν⁹: this, however, granting the restoration to be correct, proves at most that the territory of the Poemaneni extended to Gunen, while Aristides definitely separates the springs on the Aesepus (certainly at Gunen) from the temple of Asclepius at Poemanenum, which lay on his way thither. Gunen, then, may be discarded.

Prof. Ramsay in his *Historical Geography*¹⁰ placed Poemanenum in the Tarsius valley, seeing that the Pergamon road must inevitably pass west of the lake. We have evidence for a Roman road about Balıa (probably the *Ergasteria* of Galen,¹¹ 440 stades from Cyzicus on the way to Pergamon),¹² and the natural route thence to Cyzicus is the Tarsius valley. Munro,¹³ after much consideration, inclines to the opinion that 'if Aristides was making for Gunen' (which view Munro was forced to accept later),¹⁴ 'Poemanenum would fall about five miles north-west of Ildja.'

The chroniclers of Barbarossa's expedition¹⁵ throw a fresh light on the subject. The army, on its way from Lampsacus to strike the Maeandrus valley road, after crossing the Aesepus, passed a '*palus undique stagnans*' (the lake of Manyas) and encamped '*inter oppidum Ypomenon et civitatem Archangelon*'.¹⁶ *Ypomenon* is certainly the fortress of Manyas, while the *civitas Archangelos* may well represent the town about the church of S. Michael, which appears to have succeeded the temple of Asclepius at Poemanenum.¹⁷

In 1904 I was tempted by the usual mysterious rumours to visit the new Circassian village of Alexa, on the left bank of the lower Tarsius.¹⁸ Alexa is one of many settlements which have been attracted by the rich grass-lands of the broad valley, here separated from the plain and lake of Manyas only by the low ridge on which Hatji Paon stands. Overlooking the valley just west of the village is a hill crowned by a grove of small but well-grown oaks, a peculiarity shared by none of the surrounding hills; though the valley at this point is said to be full of ancient remains right down to, and even

⁸ See *Att. Mith.* xix. 272.

⁹ *Att. Mith.* ix. 35. The provenance given is 'South of Gunen.'

¹⁰ I. 502-3, Diml.

¹¹ P. 158 (after Kiepert) though he identified it with Manyas, doubting the correctness of the latter's position on the map.

¹² *De Medic. Simplic.* ix. 127.

¹³ P. 183.

¹⁴ *J.H.S.* xxi. 234-5.

¹⁵ Aubert (ed. Dubensky); Tugeno (*Fischer Scriptores II. German.*), Auen. Canisli (*Thesaurus* iii. 527, ed. 1728 Antw.)

¹⁶ *Auen. Canisli*. Aubert has *inter civitatem Archangelon et castrum quoddam*.

¹⁷ *Acrop.* 37 n. de rois n'apert roū Hionarpoū.

¹⁸ About an hour below Suleimani on Kiepert's map.

beyond, the river, this particular hill is considered the surest place for stones, and rubble foundations are visible in a clearing among the trees on the top. Such a site, facing due south, and enjoying, as I was told, immunity from the fevers of the lake plain, is perfectly suitable for a temple of Asclepius, whatever truth there may be in the villagers' story of an ancient *hammam* discovered on the slope of the hill. The grove of oaks, again, may well be referred to the ancient Zeus, who appears from the autonomous coins of Poemanenum to have preceded Asclepius.

The comparative paucity of inscribed stones may be accounted for by the newness of the settlement and by earlier plundering of the site both in modern times by neighbouring villages and very possibly also by the Byzantine builders of the castle at Manyas. Worked marble blocks are common both at Alexa and at the next village below (Tchaoush Keui), while a thorough search of the house walls—a delicate business in a Mahometan village—would probably increase the list of inscriptions.

Beyond this, remains of two ancient bridges over the river are said to exist, one immediately below the wooded hill, another half an hour higher: the river was too high at the time of my visits to allow of my seeing anything but very doubtful remains of the northern abutment of the first.

It is more important to note that the site at Alexa lies within a few minutes of the modern road between Panderma and Balia, which, taking advantage of a low way in the hills, passes through the neighbouring villages of Tchakyrdja and Hadji Paon; this road leaves the Tarsus valley at Boghaz Keui to avoid the gorge and passes through Iidja, descending into the valley again above Kailar. An eastern branch of it passes through Shamly to Balukiser. The road between Alexa and Balia, therefore, would represent the Poemanenum-Ergasteria section of the Pergamon road while the Shamly route was probably that taken by Aristides on his way to the Aesepus.

The coins shewn me in the villages included imperial of Cyzicus (at Tchaoush Keui) and at Alexa a much worn autonomous coin of Poemanenum itself; of this I have only found two other examples in the country (at Panderma and Balukiser respectively) during four seasons' collecting.

Revisiting Alexa in 1905 I found the following inscriptions:—

1. By the river: fragment of marble funeral relief. Letters .02.

ΑΝΔΡ

Ἀνδρ[ομάχη] Μητρο[-

ΔΩΡ

δώρον, χαῖρε

2. House-wall of Osman Effendi: marble .17 × .22. Letters .01.

ΙΟΣ

ΔΙΟΝΥΣΙΟΥ

Διονυσίου

ΠΟΣΙΔΕΟΣΙΤΟΥΤΟΥΑΣ

Ποσίδεος <ιτου> τοῦ Ἀθηναίου?

ΕΣΤΙΑΙΟΣΕΣΤΙΑΙΟΥ

Ἑστιαῖος Ἑστιαίου

ΘΕΟΦΡΑΣΤΟΥ

Θεοφράστου

ΟΔΟΤΟΣΘΕΟ

Θε[λ]όδοτος Θεο[δ]ότου

3. *Ibid.*: worn-bluish-marble slab at foot of stairs, 1.08 x 0.63m., with relief of herm in arched naiskos raised on steps. Letters '03.

IOY	... ίου
ΛΙΕ	χ)αίρε

Other inscriptions from Alexa are published in *J.H.S.* xxv. 60 (22); cf. *C.I.G.* 3700; *ibid.* 61 (23). See also below, No. 6.

At Tchaoush Keni are the following:—

4. Fragment with bust in relief. Letters '02.

ΛΑ	ὑπόμνημα
-ΑΙΟΥΣΓ	Γαίου Σ[ερβιλίου]
<ΙΟΥΥ	Λουκίου υἱοῦ

5. Banquet stele, '08 x '60, broken. Letters '02.

ΜΗΝΟΦΙΛΕΜΗΝΟΘΕΜΙΔΟΣ	Μηνόφιλε Μηνοθέμιδος.
ΗΡΩΦΙΛΟΠΑΤΡΙ ΧΑΙΡΕ	ἥρω φιλόπατρι, χαιρε

Below and to r. relief
of herm on steps.

For ἥρω φιλόπατρι on a funeral stele, cf. *A.-E.M.* xx. 73 = *Berl. Cat. Sculp.* 835 (Zeieia ?): on a basis *Ath. Mitth.* vii. 254, 24 (Cyzicus). I also saw fragments of a second banquet relief, and of a horseman relief, and bought the lower half of a bronze plaque of Roman date with relief of Cybele enthroned in naiskos flanked by Hermes Cadmilus and Artemis.¹⁵

From Chaoush Keni comes the stele [Pl. VI], discovered and photographed by Mr. A. E. Henderson at Yeni Manyas, and now in the Imperial Museum (No. 1502).

The dimensions of the stele are 1.08 by 0.70 metre: the reliefs are somewhat unskilled and flat. The upper represents the deceased, accompanied by (a) an attendant with spare spears and (b) two dogs, riding right with uplifted spear towards a wild boar, already seized by one of the dogs: the thick, clumsy outlines (especially the shapeless head and neck) of the horse do not suggest Greek models.

The lower relief shows a somewhat unusual type of the funeral banquet: the wife of the deceased takes her place, as usual, on his couch, while a second female figure is represented seated on a throne (which has lion-head supports) to the right of the spectator, and receiving a patera from the reclining male figure.

All the components of the upper relief occur, if not in this exact combination, on the 'horseman' stelae characteristic of Thrace. Dumont, in his

¹⁵ A somewhat similar plaque exists in the Louvre (*Catal. Bronzes* No. 616): the type is not uncommon, e.g., *Berlin, Catal. Sculp.* Nos. 892, 899.

analysis of their types,¹⁷ cites eight examples of the hero hunting; in seven his quarry is a boar, in the other a stag. In two cases he is armed with a spear, and in seven examples he is accompanied by a dog. In one at least he is followed by an attendant with a spear. Finally, in nine cases the 'horseman' relief is associated with the 'banquet' relief.

Dumont's No. 57 seems the nearest parallel to our own stele: on it the horseman gallops right holding a spear, his mantle floating in the wind; he is accompanied by a dog and attacks a boar.

Nor are we without parallels at Cyzicus itself, where the horseman relief is fairly common: in particular a stele from Ermeni Keui with two reliefs published by Dr. Mordtmann in *Ath. Mitt.* vii. 253 (28) bears marked resemblances, in type at least, to the Manyas reliefs: the style is radically different ('sehr hohes und sorgfältig gearbeitetes Basrelief') but the horseman scene (here the lower relief) is a very near parallel. Dr. Mordtmann describes it thus: 'Mann auf einem sich bäumenden Pferd, schwingt den Speer nach einem Wolf oder *iber*-artigen Thiere. Hinter ihm ein Mann den Speer auf den Rücken. Unter dem Pferd ein Hund.'

As far, then, as type is concerned, we should consider this stele one of the monuments of the immigrant Thracians, of whom we have so many traces in this part of Asia Minor,¹⁸ and whose place is aptly enough filled to-day by the horse-loving settlers from the Caucasus.

Still more interesting are the traces, first pointed out to me by Mr. G. F. Hill, of Persian influence: to it must be referred the costume of the two figures in the upper relief, and the treatment of the tail and mane of the horse. Both of these are tied or plaited, the forelock of the mane forming a kind of crest. This is shewn frequently in pure Persian monuments,¹⁹ while the tied tail occurs also on the coins supposed to have been struck by Evagoras II. in Caria:²⁰ on these coins the pose of the rider sometimes closely resembles that of our 'hero.'

A further point of interest, shewing the curiously partial action of the Persian influence, is the treatment of the boar's mane: the gap in the middle is a peculiarity common to certain districts all within the range of Greek influence.²¹

On the other side of the lake, at Yenije Keui, Munro discovered 'a marble slab with a sculptured relief of three horsemen in Oriental garb galloping over two corpses. The style and types resemble those of the

¹⁷ *Inscr. de la Thrace*, p. 513. Unfortunately none seem to be illustrated.

¹⁸ It is perhaps pertinent in the present connexion to cite as an example the name Poemanenum and the Macedonian tribe Poemanii mentioned by Stephanus. Rader (*de Colonia a Macedonibus . . . seducta*, p. 16) assigns a Macedonian origin to the place on the ground of Pliny's juxtaposition of *Poemanus* and *Macedonia*.

¹⁹ Cf. e.g. Perrot, *Perse*, p. 301, Fig. 474, and the cylinder (Babylon, Coll. Peacock de la Chapelle, Pl. III. 17) compared by Mr. Hill (*B. M. Cat. Cyprus*, xxi.) with the Evagoras coin-type.

²⁰ *Babylon, Perse Achéménides*, p. cxxiii.

²¹ Lycia, Cyprus, and S. Russia; see Furtwängler, *Götter und Völker*, p. 23: I owe this reference to the kindness of Mr. O. M. Dalton.

Lycian reliefs';²² and higher up the Karadere I saw a mutilated lion in marble which certainly betrayed non-Greek influence, especially in a curious convention of loops set in rows to represent the hair of the mane.

Another inscription probably belonging to the series is published in *Syllogos* viii, 171 (1). The provenance is given as 'near Miletropolis,'²³ the inscription being communicated by Nicodemus, Metropolitan of Cyzicus, who placed *Miletropolis at Hadji Paşa*²⁴ (Kiepert's *Adji Bunar*). The text runs:

... ισμόν ἀθεῖς τὸν βαρμόν | Ποσειδάων (εἰν) | Κλαυδιανὸς Ἀσ-
| κληπιάδου τοῦ | Ἀνδραγέικου ἱερώμε[νος πρῶτος τὸν θε-
| ον ἐκ τῶν ἰδίων | ἀνέθηκεν.

The beginning is possibly to be restored μετὰ τὸν σε[ισμόν ἀ]ραθ[ε]ῖς, but, as we know nothing of the stone, conjecture is rash: the restoration σεισμόν, however, has the advantage of giving an appropriate cause for the dedication inland. It should be noted also that (α) Κλαυδιανὸς Ἀσκληπ. is one of the few magistrates' names which occur on the imperial coins of Poemanenum;²⁵ (b) that this coin is of Commodus as Caesar: and (c) that an earthquake destroyed Smyrna in the last years of M. Aurelius.²⁶ The type of the coin—an Eros similar to the Parian—is unique in the district, and it is possible that ΕΡΩΤΟΣ should replace ΠΡΩΤΟΣ in line 7, and that the dedication refers to the statue shewn on the coin.

I take this opportunity of publishing the following:—

6. Panderma, Levon Effendi: stele with two reliefs, the upper broken away except remains of altar, Zeus and eagle: beneath. Letters 015.

ΟΥΑΡΙΣΦΡΙΩΟΣΠΩΛΛΙΩΝΚΑΕΠΙ
ΤΑΗΝΟΥΘΕΟΥΑΝΕΘΗΚΑΕΙΚΕΤΕΥΩΝ

Οὐάρι(ος) Πωλλίων κατ' ἐπι-
ταγήν τοῦ θεοῦ ἀνέθηκα εἰκετεύων

The lower relief represents a man leading bull r. to sacrifice. This stele is possibly from Alexa, since with it was a small square base with relief, of which I saw a counterpart in Alexa.

7. Fragment with remains of incised outlines of feet, inscribed (letters 015).

ΡΟΥ	ΗΓΑΔΦ	ΑΣΚΛ	ΜΗΤ
ΟΥ	ΟΣ	ΗΠΙΑ	ΟΔΙ
		ΔΟΥ	ΡΟΥ

²² *J.G.S.* 1897, 158.

²³ Ἀντιγράφη ἐν τῷ Τσερκιὰν χωρίῳ πλησίον τῆς κοινοῦσίας τῆς ἐν Μινωίᾳ Μιλητοπόλει . . . Ἐστὶ δὲ κεχαρμαγμένη ἐπὶ βάθρου προφανῶς φέρουσα σημαία ὅτι ἐχρησίμευσεν ὡς βάσις ὀνόματος.

²⁴ In his *Πρωτολόγιον περὶ τῆς ἐπαρχίας τῆς Κυζίκου*, printed with Ἀπολογία τοῦ ἐν ἀγίοις πατρὸς ἡμῶν Αἰμιλιανοῦ ἐπισκόπου τῆς Κυζίκου, Conn. 1876, pp. 20, 27: καὶ ἐκὼς τιθεμένηται

λέγουσιν οἱ τιθέντες αὐτῆς [sc. Μιλητοπόλει] κατὰ τὸ Τσερκιὰν χωρίον Χαιμαλί, ἐννοεῖται λαμβανόμενον καὶ τοῦ γένος Χριστιανικοῦ χωρίου Κατ(ῆ)-Παγών Κζα.

²⁵ Babelou, *loc. cit.*; *Waddington* 596 (Commodus); cf. also *Zeitschr. f. Num.* iii, 123.

²⁶ *Waddington, Vie d'Aristide*, pp. 66; cf. *Dio Cass.* lxxi, 37.

There are many other similar monuments from Cyzicus, Dethier *Épigr. Byz.* Pla. VII-IX incl.; *Ath. Mitt.* vi. 122, 4; vii. 252, 18a, b; x. 207, 32; cf. *C.I.G.* 6485. Outside Cyzicus, cf. Fraenkel *Inschr. v. Perg.* 574, *C.I.G.* 4945-6.

The *Thrakia Kome* stele (*J.H.S.* xxiv. 21, 4, Imperial Museum, No. 1503) is now said to have come from Mahmun Keui.

The correct restoration of the honorary inscription of Trophimus (*J.H.S.* xxiii. 77, 8) is ΓΝΩ[ΜΗ[Β]ΟΥΛΗ[ΣΚΑΙ[Δ]ΗΜΟΥ, etc.

8. Apollonia (copy communicated by M. Alphonse Serafimoff).

Stele with pediment:

ΑΠΟΛΛΩΝΙΔΟΣ ΠΡΑΞΙΟΥ
ΤΗΣ ΠΡΑΞΙΟΥ ΤΟΥ ΡΑ-
ΤΡΩΝΟΣ

Ἀπολλώνιδος Πραξίου
τῆς Πραξίου τοῦ Ρα-
τῶνος

F. W. HASLUCK.

Note on an Inscription from Marmara.

The following epigraphic text from Marmara, published by M. J. Gedeon *Πρακόννησος*,²⁷ p. 90, is not without importance for the history of Cyzicus and Proconnesus in Imperial times. Gedeon published (1) copies taken by himself of three fragments, and (2) a copy, communicated by a friend, taken from the same stone when in a more perfect condition.

(1)	α	γ	β
ΗΛΙΟΣ ΝΙΓΕΡΙΕ	ΑΤΟΚΑΙΣΑ	ΟΚΟΡΝΗΛΙΟΣ	
ΚΑΙ ΕΠΕΤΕΛΕΣΕ	ΟΥΣΑΓΩΝΑΣ	Υ	
ΑΡΧΟΥΝΤΟΣ	ΑΔΕΚΙΑΝΟΥ	ΙΕΡΗΣ	
ΕΩΕΥΤΥΧΙΔΗ	ΣΕΥΤΥΧΙΔΟΥ	ΥΤΟΚΡΑΤΟ	
ΙΣΤΗΛΛΗΝΑΝΕ	ΣΤΗΣΕΝ		
ΙΚΟΥΝΤΟΣ ΕΡΜ	ΔΩΡΟΥΤΟΥ		
ΟΛΛΩΝΙΟΥ ΙΕΡΗΣ	ΕΝΟΥΤΗΣ		
ΤΡΟΣΣΩΣΙΓΕΝΟΥ	ΟΥΜΕΝΕΥΦΡΟ		
ΣΛΑΒΟΝΤΟΣ ΑΙΔ	ΛΙΟΥ ΙΟΥΛΙΟΥ		
ΑΡΧΟΥΝΤΟΣ			
ΥΓΙΓΑΡΟΕΡ			
ΡΓΟΥ ΙΕΡΗΣ			
ΡΙΟΣ ΚΟΔΡ			
ΑΤΟΚΑΙΣΑΡ			

²⁷ Constantinople, Keil, 1895.

- (2) ΗΛΙΟΣΝΙΓΕΡΙΕΡΗΣΑΤΟΚΑΙΕΑΚΑΙΕΠΕΤΕ
 ΛΕΣΕΤΟΥΣΑΓΩΝΑΣΑΡΧΟΥΝΤΟΣΚΛ^αΑΡΧΟΥΝΤΟΣ
 ΑΥΤΟΚΡΑΤΟΡΟΣΚΑΙΤΙΤΟΥΑΙΛΑΔΡΙΑΝΟΥ^βΣΩΣΙ
 ΓΕΝΟΥΤΟΥΜΕΝΟΦΡΟΣΙΕΡΗΣΑΜΕΝΟΥΤΗΣΤΡΟΣ
 ΡΙΟΣΚΟΔΡΑΤΟΥΑΤΟΚΑΙΣΑΡΚΑΙΕΑΚΑΙΕΠΕΤΕ
 ΛΕΣΕΤΟΥΣΑΓΩΝΑΣΑΝΤΩΝΟΙΚΟΥΣΘΕΟΚΡΙ
 ΤΟΥΘΕΟΚΠΟΥΙΕΡΗΣΑΤΟΚΑΙΕΑΚΑΙΕΠΕΤΕ
 ΛΕΣΕΤΟΥΣΑΓΩΝΑΣ

(1) is a careful copy, and the small space between (α) and (γ) is easily restored: in (γ) I have divided ll. 6, 7, which are printed by Gedeon as a single line: (2) is a very unintelligent copy (further perverted by the frequent recurrence of formulae which has distracted the copyist's eye) and evidently neglectful of spaces where the inscription is illegible: the first four lines are a mangled version of ll. 1-8 in (1), the rest carries us further. I have inserted 1(β) quite conjecturally in an obvious but not indicated *lacuna* in 1(α), supplying the Emperor's name from (2), where a comparison with 1(α) shews it is misplaced.

The following is an attempt at combination:—

-Κορνήλιος Νίγερ· *ιερήσατο* Καίσα-
 ρος] και ἐπέτελεσε [τ]οὺς ἀγῶνας.
 ἱππ]αρχοῦντος [Κ]λ. Δεκίου[οῦ
 Εὐν]έω Εὐτυχίδης Εὐτυχίδου
 τῇ]ν στήλην ἀνέστησεν.
 ἱππαρ]([χ)οῦντος Ἑρμ[ο]δώρου (τ)οῦ
 Ἀπ[ο]λλωνίου, ἱερῆσ[αμ]ένου τῆς
 Μητ[ρ]ὸς Σωσιγένης[ς τ]οῦ Μενέ<υ>φρο[νος
 προ]σλαβόντος Αἰ<δ>λίου Ἰουλίου . .
 1 . . . Κορνήλιος Νίγερ . . .
 ἱερή]σατο Καίσαρος και ἐπε-]
 [τέλεσε τοὺς ἀγῶνας]
 ἱππ]αρχοῦντος αὐτοκράτορος
 Καί. Τίτου Αἰλ. Ἀδριανού [Ἀν-
 τωνα]ίνου], ἱερῆσ[αμ]ένου
 τῆς Μητ[ρ] <ι>ος Κοδρατου,
 ἱερή]σατο Καίσαρος και ἐπε-
 τέλεσε τοὺς ἀγῶνας
 ἱππαρ]χοῦντος Ἀντωνείνου] Σ[ε-
 βαστοῦ] Θεύκριτος] Θεοκ-
 ρ]([τ)ου ἱερήσατο Καί(σ)αρος
 και ἐπέτελεσε τοὺς ἀγῶνας.

For the form *ιερήσατο*, cf. *J.H.S.* xvii, 271, 12. *ιερησάμενον*.

From the inscription we gain the following information.

1. That the worship of the Proconnesian Mother (*Peus*, viii. 46) was important down to Imperial times, and that the priest was either the eponymous of Proconnesus or intimately associated with the Imperial cult: the Imperial festival mentioned, it should be remarked, was certainly not annual, as is shewn by the intercalated Hipparch Euneos; the mention of the setting up of the stele suggests that the cult was only established in Hadrianic times. A dedication to Antoninus is published by Gedeon (*op. cit.* p. 101, Pl. II. 11.)

2. Several new Hipparchs' names, viz.:

(a) Claudius Decianus (Euneos?): a Claudius Euneos was certainly *strategus* at Cyzicus under Hadrian (Coins *e.g.* B.M. 214; cf. also a base at Yeni Keni, *Ath. Mitt.* vii. 254. 24).

(b) Hermodorus Apollonii.

(c) Antoninus: on the poor authority of (2), but in consideration of other Imperial hipparchates at Cyzicus (Caligula, *Ditt.* 2. 365, Drusus, *J.H.S.* xxiv. 28). Antoninus was certainly at Cyzicus as proconsul in 120 (Waddington, *Fastes* No. 135).

F. W. HASLUCK.

CLAY-SEALINGS FROM THE FAYUM.

DURING the excavations of Messrs. Hogarth Grenfell and Hunt for the Egypt Exploration Fund in the winter of 1895-6 on the site of Karanis (Kom Ushim) in the Fayum, a considerable number of clay-sealings were found, mainly in the cellars of the Roman houses. These were recently put in my hands for investigation and offer some interesting material.

The sealings have evidently come from various kinds of articles; in many instances the clay is too much broken for any determination of the shape which it had taken to be possible; but among the better preserved pieces are examples from the mouths of bottles, some of which have been squeezed down into the neck like a cork, others placed over a linen covering, sometimes tied down with cord: others are from the flat sides of wooden boxes, often showing the marks of cord: others again from parcels of irregular shape, in some cases seemingly wrapped in papyrus. The common points of all are that they consist of lumps of Nile-mud, and that they have been impressed, while the clay was damp, with signets, which were presumably those of the merchants who forwarded the goods upon which the sealings were placed. It is these impressions which give the interest to this collection, and they are therefore catalogued in the following list.

It should be premised that the material is not a good one for taking sharp impressions from intaglios, and therefore the descriptions of the work must in some cases be rather vague. Some of the sealings, also, are breaking up through the impregnation of the clay with salt; and in a few instances the only example of a type preserved is incomplete. The list, however, attempts to give, so far as is possible, in addition to a description of the type and size of the seal, a rough classification of the workmanship: the number of impressions of each type is added. In the descriptions, the position of the objects is as they appear on the sealing.

A.—Graeco-Egyptian and Egyptian Deities.

- | | |
|--|------------------|
| 1. Head of Sarapis, facing, crowned with modius. | |
| Oval. 14 x 11 mm. | Fairly good. (5) |
| 2. Bust of Sarapis to right, wearing modius: hair bound with taenia. | |
| Oval. 12 x 8 mm. | Poor. (3) |
| 3. Bust of Sarapis to right, wearing modius: hair bound with taenia. | |
| Oval. 15 x 11 mm. | Fairly good. (1) |

4. Head of Sarapis to right, wearing modius.
Oval. 15 × 10 mm. Poor. (5)
5. Head of Sarapis to right, wearing modius, surrounded by legend ΔΙΩΝΣΑΡΑΠΙΣ
Oval. 12 × 10 mm. Moderate. (5)
6. Bust of Sarapis facing (impression from a signet in high relief). (1)
7. Head of Helios Sarapis to right, wearing modius and radiate crown: in front an object (defaced).
Oval. 15 × 11 mm. Good. (2)
8. Sarapis seated to right on throne with high back, with left hand stretched out (part of impression defaced).
Oval. 15 × 12 mm. Fair (7) (1)
9. Jugate busts to right of Sarapis, wearing modius and taenia, and Isis, crowned with disk and horns: both draped.
Oval. 12.5 × 10.5 mm. Fair. (11)
10. Jugate busts to right of Sarapis, wearing taenia, and Isis, crowned with disk and horns: both draped.
Oval. 10 × 11.5 mm. Fairly good. (2)
11. Busts of Sarapis to right, crowned with modius: behind, bust of Isis to right, crowned with horns and plumes: before, bust of hawk-headed Horus to left, crowned with modius.
Circular. 14 mm. Rough. (3)
12. Busts of Sarapis to right, wearing modius, draped, and hawk-headed Horus to right, draped, divided by vertical line.
Circular. 11 mm. Fairly good. (3)
13. Bust of Sarapis to right, flanked by figures of Dioscuri standing facing with heads turned inwards: below the bust, in two lines, the name
ΠΑCΙ
ΩΝ
Rectangular. 16 × 12 mm. Poor. (1)
14. Sarapis standing facing, with head turned to left, crowned with modius, wearing chlamys thrown over left arm, in right hand holding patera over altar: on left, Isis standing to right, crowned with disk and horns, wearing long chiton, holding in left hand a wreath over head of Sarapis, and on right arm a cornucopiae.
Circular. 11 mm. Fair. (4)
15. Bust of Sarapis to right, crowned with modius: below, eagle standing with wings spread and raised, head to left.
Oval. 15 × 12 mm. Coarse. (2)
16. Head of Sarapis to right: in front, defaced object: below, eagle standing turned to left, with wings spread, head to right.
Oval. 15 × 11 mm. Coarse. (1)
17. Head of Sarapis to right, wearing taenia and crowned with modius, faced by ram standing to left, above which a crescent.
Oval. 15 × 11 mm. Fair. (4)
18. Head of Sarapis to left, crowned with modius, faced by griffin standing to right.
Oval. 15 × 11 mm. Moderate. (1)
19. Bust of Sarapis to right, wearing taenia and crowned with modius, flanked on each side by uraeus erect turned inwards.
Circular. 19 mm. Fairly good. (6)
20. Bust of Sarapis to right, wearing taenia and crowned with modius, flanked on each side by uraeus erect turned inwards: beneath, a horizontal line: below this, scorpion with wings spread.
Oval. 19 × 14 mm. Poor. (2)

21. Bust of Sarpis to right, crowned with medusa; behind, a vulture (?) to right, in front, a hawk to left, both standing on a horizontal line: from the middle of this, a vertical line dividing lower part of field, on each side of which a lion walking inwards: at bottom, scarab with wings spread.
Oval. 17 x 13 mm. Poor. (1)
22. Head of Sarpis to right flanked by erect uraei turned inwards: below, two lions standing facing each other: at bottom, scarab with wings spread.
Oval. 17 x 12 mm. Poor. (7)
23. Isis seated to right on high-backed throne, crowned with disk and horns and wearing a long chiton: she nurses an infant Harpocrates crowned with skhent, raising his right hand and holding in his left a lotus-flower (?): in front IH (or HI).
Oval. 16 x 12 mm. Rough. (8)
24. Isis seated nursing Horus as on 23, but Horus holds nothing in his left hand.
Oval. 18 x 12 mm. Fair. (1)
25. Bust of Horus, body facing, head to right, crowned with disk, and wearing deep collar: side-lock shown.
Oval. 15 x 11 mm. Fair. (3)
26. Bust of Horus, body facing, head to right, wearing deep collar: side-lock shown.
Oval. 10 x 7 mm. Moderate. (4)
27. Bust of Horus, body facing, head to right, wearing deep collar, side lock shown: in front, serpent.
Oval. 15 x 11 mm. Coarse. (1)
28. Bust of Horus as on 27, with serpent in front.
Oval. 12 x 9 mm. Fairly good. (1)
29. Bust of Horus, hawk-headed, body facing, head to right, crowned with skhent and wearing deep collar.
Oval. 14 x 10 mm. Fair. (9)
30. Bust of Horus, serpent-headed, body facing, head to right, wearing deep collar.
Oval. 12 x 9 mm. Moderate. (15)
31. Horus seated to right on ground, with knees drawn up, crowned with skhent, holding out serpent in his right hand.
Oval. 12 x 9 mm. Rough. (28)
32. Horus seated with serpent as on 31.
Oval. 10 x 6 mm. Poor. (8)
33. Horus standing facing, head to right, nude, holding up a serpent in each hand.
Oval. 12 x 9 mm. Fair. (13)
34. Horus standing with serpents as on 33.
Oval. 14 x 10 mm. Rough. (5)
35. Horus seated to left on throne, wearing long robe: behind him, gazelle to right (upper part only shown): before him, baboon seated on its haunches to right: above this, Ruis (?) to right: over his head, an indefinite object: he holds out a snake (or scorpion) with both hands.
Oval. 15 x 13 mm. Poor. (10)
36. Horus seated to left, nude, with knees drawn up, on basket: facing him, winged griffin seated to right, with left front paw raised: above its head, uraeus erect to right: between this and head of Horus, scarab: above this, scorpion to right.
Oval. 16 x 11 mm. Fair. (6)
37. Horus seated to right, nude, with knees drawn up, disk on head: facing him, hawk standing to left: over it, disk and uraeus (?) to left.
Oval. 17 x 13 mm. Coarse. (1)
38. Bust of Harpocrates to right, crowned with skhent, finger to lips.
Oval. 8 x 5 mm. Poor. (6)

39. Harpokrates standing to left, nude, with right hand to lips, and cornucopias on left arm.
Oval. 12 x 8 mm. Fair. (13)
40. Harpokrates (?) standing to left, nude, with right hand raised, left resting on sceptre : in front, altar.
Oval. 11 x 8 mm. Fair. (1)
41. Harpokrates seated to left, on lotus-flower, nude, disk on head, with right hand to lips, holding club in left.
Oval. 13 x 10 mm. Poor. (2)
42. Harpokrates seated on horse advancing to right, nude, crowned with skhent (?), head turned back, hand to lips.
Oval. 12 x 9 mm. Bad. (12)
43. Harpokrates seated to right, apparently nude and crowned with modius, left hand to lips, right holding scourge over shoulder, on ram walking to right.
Oval. 16 x 11 mm. Fair. (1)
44. Harpokrates seated to left, nude, with right hand to mouth, on back of androphorix couched to right.
Circular. 12 mm. Poor. (1)
45. Bust of Hershef, ram-headed, facing, showing horns on each side, wearing hem-hem crown.
Oval. 15 x 11 mm. Rough. (2)
46. Bust of Zeus Ammon to right, draped, crowned with disk.
Oval. 15 x 12 mm. Fair. (1)
47. Bust of Zeus Ammon to right, draped, crowned with disk.
Rectangular. 12 x 10 mm. Fair. (3)
48. Head of Zeus Ammon to right, crowned with disk : below, ram standing to right crowned with disk and horns.
Oval. 17 x 13 mm. Rough. (1)
49. Anubis, jackal-headed, standing facing, head to left, nude, holding palm-branch (?) in right hand, in left caduceus: chlamys thrown over left arm.
Oval. 14 x 10 mm. Fair. (12)
50. Hermaphrodite standing facing, head to left, nude, with legs crossed, and left elbow resting on pillar : in right hand palm-branch, in left caduceus (?)
Oval. 15 x 12 mm. Fair. (1)
51. Bust of Osiris, facing, wearing atef (?) crown, scourge over each shoulder.
Oval. 14 x 12 mm. Bad. (5)

B.—Greek Deities and Mythical Figures.

52. Bust of Athena to right, wearing helmet : in front, spear upright.
Oval. 12 x 10 mm. Fair. (10)
53. Athena advancing to right wearing long chiton, left hand raised, with right seizing serpent erect in front.
Oval. 12 x 9 mm. Poor. (41)
54. Bust of Apollo to right, wearing taenia, chlamys over shoulders (of archaistic style).
Oval. 10 x 9 mm. Fair. (3)
55. Bust of Helios to right, wearing radiate crown, chlamys over shoulders.
Oval. 13 x 9 mm. Fair. (8)
56. Head of Herakles to right, bearded, wearing taenia.
Oval. 17 x 15 mm. Coarse. (3)
57. Head of Herakles to right, bearded.
Oval. 15 x 11 mm. Fair. (2)

58. Herakles standing facing, head to right, nude, holding out on left hand figure of Nike, in right hand lion-skin and club.
Oval. 13 x 9 mm. Fair. (2)
59. Tyche standing to right, wearing long chiton and peplos, crowned with modius: in left hand rudder, on right arm cornucopiae.
Oval. 15 x 10 mm. Fair. (7)
60. Tyche standing to left, wearing long chiton, crowned with modius: in right hand rudder, on left arm cornucopiae.
Oval. 18 x 14 mm. Fairly good. (1)
61. Leda reclining to left, with robe over legs, embraced by awan.
Oval. 14 x 11 mm. Moderate. (7)
62. Gorgonion.
Oval. 18 x 14 mm. Fair. (2)

C.—*Egyptian Animal Forms.*

63. Ram standing to left, with head turned back: round upper edge from right, with letters outwards, the legend $\epsilon\iota\kappa\theta\epsilon\omicron\omicron$
Oval. 13 x 11 mm. Fair. (1)
64. Hawk-headed crocodile (Soknopaios?), crowned with disk (?), to right, head turned back: behind head, crescent: legs twisted underneath: below, two lines (perhaps $\overline{\text{E}}$).
Oval. 16 x 13 mm. Rough. (7)
65. Winged griffin seated to right on haunches.
Oval. 15 x 14 mm. Rough. (4)
66. Winged griffin, seated to right on haunches: right fore-paw on wheel.
Oval. 16 x 15 mm. Moderate. (1)
67. Winged griffin, couched to right.
Oval. 10 x 7 mm. Fair. (10)
68. Griffin seated to right on haunches.
Oval. 12 x 9 mm. Poor. (1)
69. Lion-headed sphinx couched to right: below, scarab with wings spread.
Oval. 13 x 10 mm. Fair. (3)
70. Lion-headed sphinx couched to right: below, scarab with wings spread: behind head, crescent (?).
Oval. 14 x 11 mm. Moderate. (7)
71. Human-headed sphinx couched to right, with Egyptian headdress: tail turned over back, with threefold end: in right paw, ank (??) upright.
Oval. 16 x 13 mm. Moderate. (1)
72. Uraeus serpent erect to right, crescent on head: a key (?) horizontally across field: at edge, below, on right, $\text{O}\overline{\text{I}}$, above, on left, $\overline{\text{Q}}$ (i.e. $\overline{\text{IOP}}$ reversed).
Circular. 33 mm. Fair. (3)
73. Two uraei, erect, crowned with disks, facing one another.
Oval. 15 x 12 mm. Fair. (3)
74. Two uraei erect, facing one another.
Oval. 14 x 12 mm. Poor. (2)
75. Two uraei as 74.
Oval. 12 x 10 mm. Poor. (1)
76. Two uraei as 74.
Oval. 13 x 11 mm. Poor. (2)
77. Two uraei as 74, but crowned with crowns of Upper and Lower Egypt respectively.
Oval. 12 x 10 mm. Coarse. (2)

78. Stamp divided into two compartments vertically: in left one, uraeus serpent erect to right: in right, $\Sigma 90$ downwards: surrounded by line-border (1 'Operevmdfus).
Rectangular. 30 x 25 mm. Rough. (42)
79. Uraeus serpent with head of Serapis, erect to left, crowned with modius, confronted by uraeus with head of Isis, erect to right, crowned with disk and horns: both on basket-base.
Oval. 16 x 12 mm. Moderate. (3)
80. Serpent with human head erect to right, crowned with plumes, confronted by hawk standing to left.
Oval. 16 x 13 mm. Rude. (3)
81. Agathodaemon serpent with human head erect to right, crowned with modius (?), holding in its coils stalks of corn.
Oval. 16 x 11 mm. Fair. (3)

D.—Miscellaneous Scenes.

82. Figure of a man with right hand raised, in chariot drawn by two horses advancing to left.
Circular. 12 mm. Poor. (1)
83. Figure riding to right, with right hand raised, apparently on a bull with its tail in the air: before this a male figure reclining to left, with right hand outstretched, and cornucopias (?) on left arm (perhaps Nilus).
Oval. 16 x 10 mm. Moderate. (4)
84. Bearded figure standing to left, wearing short chiton and extending hand to smaller figure in front standing to right with hand raised: on the left, an indefinite object: on the right, a palm-tree and a hawk (?) standing to left: below, a line, beneath which two figures looking towards one another with hands raised over an altar (?) and to right of these three figures facing with both arms raised.
Oval. 18 x 15 mm. Rude. (2)
85. Three figures standing facing, in long robes.
Circular. 12 mm. Moderate. (2)
86. Three figures standing facing, in long robes: the centre one with both arms raised, the outer ones with outer arm raised in each case.
Circular. 13 mm. Rude. (1)
87. Nike flying to right, in long chiton, holding out wreath over figure lying on ground.
Oval. 15 x 10 mm. Fair. (5)
88. In centre, tree, on right of which a man (?) standing to right, with altar in front: on left, an animal standing to right with head turned back.
Oval. 13 x 10 mm. Poor. (1)
89. Lion springing to right on gazelle crouched to right with head turned back.
Oval. 16 x 12 mm. Fair. (6)
90. Modius filled with corn: serpent issuing to right: below, indefinite object.
Oval. 17 x 11 mm. Moderate. (2)

E.—Busts: possibly Portraits.

91. Female bust to right, hair bound with taenia (possibly Cleopatra VII).
Oval. 21 x 16 mm. Moderate. (1)
92. Bust to right, with Egyptian royal headdress: in front, $\Delta \Pi \Theta$
Oval. 15 x 11 mm. Fair. (1)
93. Bust to right, with Egyptian royal headdress: beneath, crocodile to right.
Oval. 14 x 10 mm. Fair. (1)

94. Host (male ?) to right.
Oval. 12 × 8 mm. [Worn.] (5)
95. Male host to right.
Oval. 15 × 11 mm. [Worn.] (1)

F.—Names and Linear Devices.

96. Name in two lines
 ΩΝΝΟ (Ὠνώφης)
 ΣΙΡΦ
 Rectangular. 10 × 6 mm. (5)
97. Part of stamp in two lines: apparently
 ON/
 TBI
 Oval. 15 × 10 mm. (1)
98. Fragment of stamp with name
 ΑΡΙΣ
 Circular (?) (1)
99. Key shown horizontally, handle to right: above, ΜΙΑΡΑΞ, below, ΩΤΑΡΒΞ
 Rectangular. 14 × 8 mm. (2)
100. Linear device.
 Rectangular. 11 × 5 mm. (3)

Ten stamps too much damaged for identification.

The main importance of this group of sealings lies in the evidence given by them as to the kind of devices favoured for signet-rings among members of the merchant class in Egypt: incidentally, some light is thereby thrown on the popularity of various deities in the same society. Whether the rings were specially made to order—as must have been the case where they were engraved with the owner's name—or selected by purchasers from a stock kept ready by the dealer, it may reasonably be assumed that, as a rule, a man's religious partialities would influence his choice of a signet, and that engravers, when preparing a supply of goods, would have a special regard to the ideas and beliefs most generally current among their customers. It will be observed that types connected with Egyptian or Greek religion and mythology form the great majority in the foregoing catalogue.

Fortunately, it is possible to compare with this collection a list of signets from another district. In the first half of the second century A.D. it was customary at Oxyrhynchus for the witnesses to a will to specify their *σφραγίδες*; and nine of the published Oxyrhynchus papyri (Nos. 105, 489-492, 494, 654, 646, 649) thus give particulars of thirty-five examples. The following is the list of the devices:—

Sarapis (6 examples): Isis (2): Harpokrates (3): Harpokrates standing: Harpokrates on a lotus: Ammon: Helios Ammon: Zeus: Zeus on an eagle: Athene (3): Apollo: Hermes (3): Herakles (2): Dionysus: Silenus: Tyche with a rudder: Thonis: Enkanopos: *δρακοντόμορφος* (probably a serpent with human head): a philosopher (2): *Διονυσόπλάτης*.

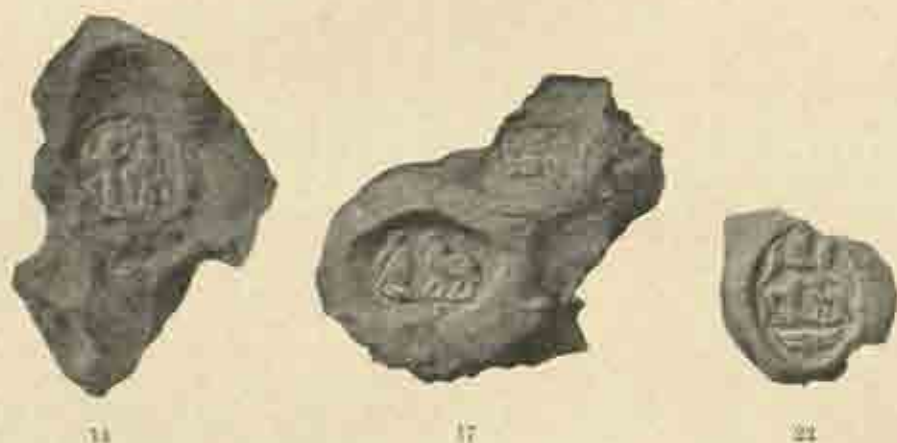
This list shows much the same kind of types as the Fayum sealings, and the owners of the Oxyrhynchus signets were doubtless of the same social rank as the merchants who sealed the jars and boxes for the Fayum trade: at any rate, it is clear from the contents of the wills that the testators were 'middle class' people, living in the town and possessed of some small property; and they would presumably find the witnesses to their signatures among members of their own class.

These Oxyrhynchus signets are also not far removed in date from the Fayum sealings. The latter appear to be of the middle of the second century A.D.; the scanty epigraphic evidence given by the names or legends engraved on the seals points generally to this period; and a closer determination can be obtained from the types. These show, as will be more fully stated later, a general relation to the reverse-types of the Alexandrian coins; and in two instances—Nos. 13 and 14—the resemblance is so close that the devices on the signets must either have been borrowed from the coins or derived from the same source. The coins in question (Dattari Numi Alexandrini 2863 = British Museum Catalogue (Alexandria) 1108, and Dattari 3530) are both large bronze pieces of Antoninus Pius; and, like many of this series and reign, have for their reverse-types somewhat elaborate groups of a kind almost unknown in earlier and later periods of the Alexandrian mint. It is not practicable here to discuss at length the general question of the derivation of such types; but there is much reason to suppose that the die-engravers to the mint in this reign did not as a rule take their types directly from any existing works of art, but designed them freely and with some originality. If this is granted, the signet-devices must have been borrowed from the coins, and were probably engraved very shortly after the issue of the latter, as the Alexandrian bronze coinage of the second century wore badly and soon became defaced: their date may therefore be taken as about the end of the reign of Antoninus Pius.

The types have been roughly classified in the catalogue; but it is worth while to examine some of them in more detail. There is a distinct preponderance of Egyptian and Graeco-Egyptian religious subjects (classes A and C) among them; and the largest part of these is supplied by representations of the Alexandrian triad—Sarapis, Isis, and Harpocrates or Horus. It may be observed that, while Sarapis and Harpocrates are frequently represented alone, Isis only appears either by the side of Sarapis or nursing Harpocrates. This circumstance may be illustrated by the relative frequency and nature of references to these deities in papyri, and by other extant representations. Sarapis was, practically, the official supreme deity: if the writer of a letter expressed a wish for the health of a friend, this almost invariably took the form of a prayer to Sarapis. His temple at Alexandria was the chief one of the town, the neocorate of which was a sufficient honour to be accepted by Roman officials; and most provincial towns seem to have had similar Sarapieia which, if Oxyrhynchus is a typical example, served as centres of the social life of the towns in which they stood. But, while temple statues of Sarapis must have been common, and a comparatively large number of

remains of large figures of him are extant, minor representations in bronze or terracotta are proportionately rare; and almost all conform to one or two fixed types, one seated, the other standing. It would perhaps be fair to describe Sarapis as a god who was worshipped in temples. Isis is much more frequently mentioned than Sarapis, though commonly with the addition of one of her myriad names, marking her as a local form of the goddess which had possibly been quite distinct in origin; and her worship was usually joined and subordinated to that of some male god. Her temples, or rather shrines, were apparently of small official account: in the ordinances of Ptolemy Evergetes II they are classed with animal shrines, and such evidence as is given by the papyri concerning them goes to show that they were not endowed, but depended for their support on the offerings of the pious and the begging of the priests. The essential importance of the Isis worship seems to have been in the fact that it was a link with an earlier period of Egyptian religion: she was a native goddess, who was allowed to remain in the official triad; and, though crowded out of the first place in the temples, was kept in evidence by the priests. She had become the goddess of the wayside. The popular god, however, was Horus, especially in the form of Harpokrates: terracotta statuettes of him, in a multitude of types, abound at every Graeco-Roman site in Egypt, though there are few references to his worship in the written records, and he was rarely the principal deity to whom a temple was dedicated. He was essentially the god of the house.

The types of Sarapis on the sealings do not call for much remark: as noted above, they generally follow regular types. There was a tendency in the Roman period to develop a pantheistic form, beginning with the fusion of Zeus and Helios with Sarapis, and extending later to the inclusion of Ammon and



14

17

21

Poseidon: the head of Helios-Sarapis (7) is an instance of this in the earlier stages, with which may be compared the Helios-Ammon of the Oxyrhynchus lists. As has been remarked previously, the representation of a bust of Sarapis flanked by figures of the Dioscuri (13) is interesting, on account of its

correspondence with the reverse-type of a coin of Antoninus Pius, a name taking on the seal the place of the date on the coin; and the group of Sarapis crowned by Isis (14) is also traceable to a coin-type. The association of the bust of Sarapis with an eagle, a ram, or a griffin can likewise be paralleled on coins; but the more complex groups, especially those in which the lion occurs (21 and 22), are exceptional, and are probably due to Gnostic influence.

Some Gnostic connexions are also traceable in the Horus-types, especially on Nos. 35 and 36, where the association with the gazelle in one case and the scorpion in the other are particularly noticeable. In nearly all examples a serpent appears, either in the field or held by Horus, which may also be



28



35 (and 9)



36

put down as a Gnostic symbol. The types which are marked by the position of the hand of the deity against his lips as representing Harpokrates are more (distinctively Graeco-Egyptian, both in style and attributes, and can generally be paralleled from Alexandrian coins, which show nothing corresponding to



39



41



45

the Horus-types. One or two of the forms of Harpokrates may be assignable to special localities—the Harpokrates on the lotus (41) is taken to represent

Harpokrates of Taus, and the Harpokrates on the androsphinx Harpokrates of Buto, while the figure on the ram carrying a scourge may be Harpokrates of Mendes; but, as these types were used on the Alexandrian coinage, they would be disseminated through Egypt, and cannot be taken as marking definitely a connexion between the sealings and the special centres of the worship of Harpokrates. The type of Harpokrates on the lotus reappears on the Oxyrhynchus signets. The bust of Hershef (45) is of a more distinctly local character, and is not, so far as known at present, a coin-type: in this case there is some probability that the signet from which the impression was taken belonged to an inhabitant of Herakleopolis Magna, the seat of this deity.

The only remaining examples amongst those classed as of Graeco-Egyptian and Egyptian deities which offer points of interest are those of Anubis and Hermanubis (49 and 50), which stand in much the same relation as those of Horus and Harpokrates: the jackal-headed Anubis is the more



48



49

Egyptian form, and possibly is influenced by Gnostic ideas, while Hermanubis appears in a Greek type closely related to that of Hermes and similar to that of the Alexandrian coins.

There are comparatively few among these sealings which can be called distinctly Greek: of those which have been placed under this head, the two types of Athene (52 and 53) are very probably assignable to the influence of her worship at Oxyrhynchus, where she was identified with the local goddess Thooris: this is the more likely as these types are very closely related to two which commonly appear on a class of leaden pieces of which large numbers have been found at Oxyrhynchus, and which almost certainly represent a local token-currency. The Tyche types (59 and 60) are probably taken from Alexandrian coins; and the types of Herakles, while not directly traceable to coins may perhaps have been suggested by the series of representations of the labours of Herakles issued from the Alexandrian mint under Antoninus Pius, unless they are due to the equation of Herakles with Hershef at Herakleopolis Magna. It may be noted that Athene, Tyche, and Herakles, as well as Apollo, are all to be found among the Oxyrhynchus signets. The most definitely Hellenic of all the sealings is really the group of Leda with the swan (61): which was, for some reason, a very popular subject in Egyptian art down to Coptic times.

The class of animal-forms does not provide much of interest. The hawk-headed crocodile of No. 64 is probably Soknopaios, the local form of the crocodile god Sebek worshipped at Soknopaiou Nesos (Dumh) in the Fayum,



61



53

as he seems to have been represented in this shape. The comparative commonness of serpent-types—though both the human-headed serpent, the *δρακοντάμορφος* of Oxyrhynchus, and the uræus with disk or royal crown are frequently



79



67

found on Alexandrian coins—may be due to some extent to Gnosticism: in one case at any rate (72) a Gnostic influence is marked by the addition of a key. It is possible that No. 78 is intended as a *rebus*—the serpent with

the letters *Opσ* representing the name, common in the Fayum during the Græco-Roman period, of *Ὀρσενούφης*.

In class D there are some puzzling groups, which need further explanation. No 82—a figure of a man in a biga—is probably borrowed from the coin-type representing an emperor which was among the commonest on Alexandrian large bronze of the second century. The attitude of the reclining



82



81

figure on No. 83 suggests that it is Nilus—and in this case the figure riding towards him on a bull may be the genius of the inundation. The worn condition of the examples of Nos. 85 and 86, as well as the rough work of the signets, makes it impracticable to say what was intended by the groups of three figures; and the same difficulties prevent the interpretation of the more complicated scenes on Nos. 84 and 88.

Some of the busts classed under E may be intended for portraits, or they may be of a generic nature, as were presumably the 'philosophers' who appeared on two Oxyrhynchus signets. But, if their origin may be looked for on coins, the female bust on No. 91 shows considerable similarity to that of Cleopatra VII on her copper coins, while the busts with Egyptian royal head-dress of Nos. 92 and 93 resemble the types of Arsinoite nome-coins struck under Hadrian—the possible connexion with which is strengthened in the case of No. 93 by the addition under the bust of a crocodile, also a type of the coins of the same nome in the same reign.

Among the last group, the only signet calling for special note is No. 99, which is the most distinctly Gnostic of all, with the representation of a key flanked by two mystic words.

From the foregoing remarks, it will be seen that, in a large proportion of instances, the sealings show a close analogy to Alexandrian coin-types; the most noticeable exceptions being in the cases where Gnostic influence is traceable, especially in the group of representations of Horus. And, so far as it is possible to judge of the style of the signets, there is a certain distinction of treatment which is parallel to this division of the types. The figures drawn from Greek mythology, and also those of the Alexandrian triad—Sarapis, Isis, and Harpokrates—are unmistakably Greek in style; pose and dress are alike derived from Greek tradition; and the designs which are not to be

found on Alexandrian coins are executed in a manner so similar to that of the coin-types that the seal-engravers might be regarded as workmen of the same school as the men employed in the mint of Alexandria. On the other hand, the influence of native Egyptian ideas in the execution of the figures of Horus is equally clear in every way: the difference is not simply due to the endeavour of the artist to give a purely Egyptian character to his representation of the god, as may be seen if the treatment of the bust with Egyptian royal headdress (No. 92), which, notwithstanding the subject is Greek in effect, is contrasted with that of any of the busts of Horus (Nos. 25 to 28).

It is of course impossible to say where the seals were made, or even where they were used. The accumulation of the clay impressions at Karanis only marks the spot where the goods were unpacked: they may have been packed and sealed anywhere in the Nile valley. And the types are, for the most part, such as can hardly be definitely localised: the bust of Hershef (No. 45) would be most likely to be used by an inhabitant of Herakleopolis Magna, the figure of Athene (Nos. 52 and 53) by one of Oxyrhynchus, that of Soknopaios (No. 64) by one of Soknopaiou Nesos; but Sarapis or Horus, Hefios or Tyche, a sphinx or a serpent, might be expected equally well in almost any district of Egypt. The Nile-mud of the sealings limits them to Egypt; but no closer definition is possible. And the signets themselves may have been made at Alexandria, or by local workmen in the country towns; but, except in one or two instances, there is nothing in style or subject to suggest any likelihood that they were imported into Egypt. It is fairly safe to say that they represent the kind of work executed for ordinary use in Egypt about the middle of the second century A.D.

J. G. MILNE.

NOTE.—The illustrations are derived from photographs, which have been slightly enlarged and touched up for purposes of reproduction by Mr. F. Anderson after examination of the original sealings. I have deposited a set of negatives, showing examples of all the types described, with the Hellenic Society.

DETAILS OF THE OLYMPIAN 'TREASURIES'

IN a preceding article (*J.H.S.* vol. xxv, pp. 294-319) the attempt was made to fix chronologically the order in which the Olympian 'treasuries' were founded, and conclusions were summarily presented in connexion with a general consideration of the origin and function of 'treasuries' at Olympia and elsewhere. Now it is necessary to test these conclusions by a detailed examination of the architectural remains found on the terrace at Olympia, and in so doing to pass in review the successively founded Olympian communal houses called treasuries, taking them in the order thus theoretically arrived at, *i.e.* XII, X, XI, VII, VI, V, IX, IV, II, III, and I.¹

*The Geloans' House, No. XII.*²—The foundations of this fabric were identified at the eastern verge of the terrace in 1877-78, in which year various parts of its superstructure came to light at the opposite corner of the Altis; but not till 1881-83 was this superstructure—entablature-stones of several kinds and fragments of terracotta (painted and unpainted) belonging to the treasury-chamber, as well as triglyphs, metopes, columns, and capitals belonging to the porch—completely recognised and convincingly distributed between the old treasury-chamber and the later porch.³ The stereobate of the Geloans' porch has disappeared, and its extant foundations are mere footings of broken stones. In contrast with these are the foundations of the old 'treasury'-chamber or cella behind, consisting of blocks of a somewhat

¹ Practically all the available facts, together with the most various and valuable conclusions, not always easy to acknowledge adequately in detail, are derived from *Olympion die Ergebnisse der von dem Deutschen Reich veranstalteten Ausgrabung* (A. Asher and Co., Berlin, 1892-1897). The five *Textbänder* are referred to as OL Text I-V, the four volumes of plates as OL Pl. I-IV, and the Atlas as OL At. Of the plates and cuts in this truly monumental publication the freest use has been allowed and the kindness is hereby gratefully acknowledged.

² See Fig. 1, and *J.H.S.* xxv, pp. 298 ff., 303 f., and 308 f.

³ When, late in the fifth century A.D., the menace of Vandal piracy prompted the building of an Olympian fort or rather 'block-house'

(see Dr. Adler's account of it, OL Text I, p. 85), entablature-stones, triglyphs and metopes of poros were taken from the south porch of the Geloans' treasury and built into the east wall of this improvised stronghold. Later, for the completion of its south-west wall, the builders of Leo I completed their dismantlement of the porch as well as of the older treasury-chamber behind it, and of the Megarians' treasury (XI) adjoining. Here were recovered further entablature-stones and also drums and capitals of poros belonging to the south porch aforesaid, and with them entablature-stones of a decidedly harder poros,—identical with that used in the foundations of the Old Geloans' treasury-chamber, mixed up with broken bits of brilliantly-painted terracotta veneering.

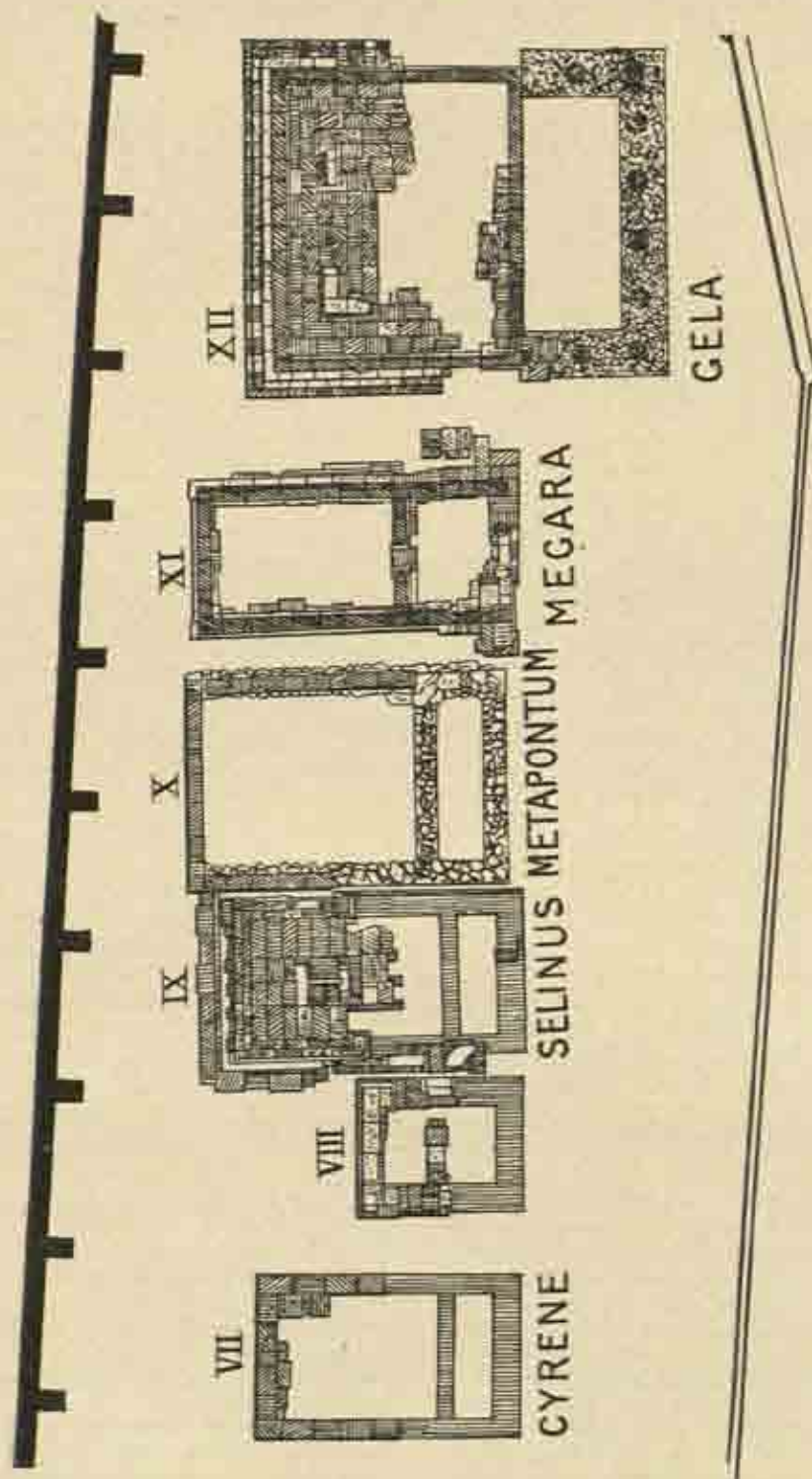


Fig. 3.

coarse poros with petrified molluscs.⁴ Of this same poros are the entablature-blocks belonging to the old Geloans' 'treasury,' and found in the west wall of Leo's fort. These are of three classes. I, with tops upslanting for the course of roof-tiles next to the caves, an interior dressed face sunk to provide seatings for the ends of ascending rafters and horizontal beams, and an exterior dressed face offering two vertical bands of about equal height, the lower being slightly recessed so as to leave a narrow intervening soffit, while it ends downward with a more extensive soffit, inward-slanting after the fashion of eaves.⁵ Blocks of this class (I) formed the entire entablature along the northern and southern sides of the quadrilateral chamber, while blocks of the two following classes, II and III, formed the pedimental entablature along the eastern and western faces; but blocks of class II, shewing a front face exactly reproducing the bands and soffits of class I, unite with these last in completing what must be called the architrave of the treasury-chamber, although it has no frieze. Blocks of class II differ from those of class I in their tops, which are not upslanting but fit the square dressed tympanum-blocks above. Blocks of class III shew a front face reproducing only the upper band and soffit of I and II, and are dressed at the inside so as to receive in suitable channellings the sides of all the courses of roof-tiling, being otherwise so dressed and combined as to form a coping for the obtuse angles of the tympana.⁶

Common peculiarities of these entablature-blocks, classed I, II, and III, and shewn in Fig. 2, are: (a) the same iron nails (measuring 5 millimetres) in positions corresponding to perforations in the fragments of a brilliantly painted⁷ terracotta scheme of veneering applied to them all on a consistent

⁴ See Dr. Dörpfeld's account, *Ol. Text ii*, p. 217.

⁵ Fig. 2, bottom.

⁶ By no means all the blocks of class I have been recovered; those that are missing may perhaps be accounted for by the broken bits picked up on the terraces close to the Geloans' foundations. Leo's engineers may have flung them down. If so they were doubtless carried off by nameless and undated village-builders, since the Geloans' treasury is most easy of access from the old high-road still leading to Menka. The north and south walls, to which these blocks (I) corresponded, measured 13·17 metres each. The recovered blocks of class II measure 18 good metres, so that each of the two horizontal copings running under the tympana must have measured at least 9 metres. The foundations call for a width of 11·19 metres. This discrepancy can be partially corrected by calculations based on the numerous recovered stones of the tympana. The height of each tympanum was 1·43 metre, the gradient was 1:7, and therefore 10 metres is the length for the east and west sides or faces

of the quadrilateral chamber. Add 0·30 metre for the spread of each of the eaves, and the resulting 10·80 metres is not surprisingly at variance with the 11·19 metres of the *Louaplen* in *Ol. At.* In fact a discrepancy of 0·59 metre between superstructure and foundations in so archaic a building can hardly be deemed discreditable or disconcerting. By these calculations Dr. Dörpfeld has banished the last possible doubt as to assigning blocks I and III to the pedimental entablatures of the Geloans' treasury-chamber, and these, being thus assigned, carry with them, as certainly belonging to the sides of the same quadrilateral building, the blocks of class II, although so few of them have been recovered that their total length falls short of that of the corresponding foundations by upwards of 11 metres.

⁷ The astonishing brilliancy and persistence, after more than two and a half thousand years, of the matt-glimmering colours on these and other archaic terracottas used for architectural decoration in Greece, Magna Græcia, and Sicily, derives from skill in their manufacture as well as from skill in the application of the colours.

plan similar to other schemes of the kind peculiar to Sicily and Magna Graecia: * (b) the same colour and consistency shewn (in that constituent part of the clay which had been only once and moderately fired) throughout the terracotta veneering common to all three classes of blocks as well as in that of the cornice which decorated them all.

Invented no doubt before stone had supplanted wood, and developed while still imperfect tools made the smooth dressing of stone a formidable undertaking, the fashion of sheathings or veneerings was carried to a great pitch of perfection in far eastern countries, and long survived in Sicily and Magna Graecia. Indeed, as applied to the Geloans' Olympian house and to the Selinuntine temple 'C,' this system has its sound practical justification. It probably protects the top of a fabric,—parts exposed to the weather,—better

in their manufacture these ancient clays were not—when compared with undecorated specimens of the same period, or with modern terracottas decorated and undecorated—subjected to a high degree of temperature. But permanency requires great heat which involves loss of brilliancy, and so the facts are disconcerting. This manufacturer's puzzle is, however, solved by noting that all these archaic terracottas were composed of two ingredients: (a) local clay of varying colours,—for the Geloans' treasury and at Gela, of a pronounced ruddy hue (this ruddy Geloan clay suggests manufacture at Gela and subsequent importation); of a pinkish colour for the Megarians' treasury (XI); of a yellowish-gray for the Olympian Heraeum and Cornelia House,—and (b) an invariable ingredient of black metal, or, to be more specific, an admixture of bright black grits or grains (measuring from 2 to 4 millimetres). Chemical analysis by a manufacturing expert of this ingredient (common to all archaic terracottas), made at Dr. Wiegand's request, reveals in the black metal of terracotta from the Geloans' treasury only 0.63 more of silicic acid than is contained in 'schaffhausener Klinkerthou' i.e. twice-burnt clay having in its second firing been subjected to a maximum heat. Plentiful admixture of such twice-burnt clay thus plays its part in producing brilliancy and persistency of colouring on all archaic terracottas by making it possible to dispense (when the two ingredients, (a) and (b), have been mixed together) with the maximum heat in firing which would otherwise have been quite indispensable. (See pp. 182 f. in Dr. Wiegand's *Porzellanindustrie der Altropole zu Athen*, Th. G. Fischer [Kassel und Leipzig, 1904], which will be referred to below as *Wiegand*.) Of equal importance in producing the results obtained was the skillful method used, before the clay was burned, in

applying the three colours, and in finishing the surface. The mixture of black metal and unburnt local clay was first modelled, then its surface was washed over with a very thin slip or engobe of fine buff clay which formed a self-coloured background of delicate yellow, instead of the decoratively hopeless motley of the unwashed metal. Then came the etching (or stamping) of the pattern, which finally was painted in with the two remaining colours, red and black. All this done, and the model still having something like the leathery consistency of sun-dried clay, a spatula was deftly plied over all its surfaces which were smoothed, and took on their peculiarly subdued and glimmering polish. (On all these processes, see Dr. Graef in *Ol. Text* ii, pp. 189 f.)

* See M. A. Choisy's *Histoire de l'Architecture*, I, pp. 263 ff., where, by a slip of the pen, an Olympian treasury of the *Himerseans* is mentioned, the reference being doubtless to the treasury of the *Selinuntines*. Fragments of terracotta veneering which may have belonged to this treasury (IX) are discussed by Dr. Graef (*Ol. Text* ii, pp. 26 f.) and assigned doubtfully to treasury IV. Certainly the recovered fragments of terracotta veneering belonging to temple 'C' at Selinus (see M. Choisy's account) suggest the probable employment of a similar decoration at Olympia by the *Selinuntines* in their treasury (IX), and this idea is confirmed by Dr. Graef's observation (*Ol. Text* ii, p. 189) that terracottas painted in three colours persisted in Sicily long after they had been superseded in Greece by painted marble or stuccoed pores. This being granted, treasury IX, though none of the earliest, may well have been recovered. It should be remembered that terracotta veneering was superseded very early in Greece proper by the application of firm stucco, whereas the use of terracotta cornices lasted longer.

than any stucco such as was used in conjunction with it (on less exposed parts) by the Old Gelon builders at Olympia.⁹ Turning now to Figure 2, note the recessed band along the bottom of I and II, upon which a shadow from the veneered projection above is thrown. On this less exposed band and the slightly upslanting soffit below it stucco was applied. Although nothing is known of the Gelon fabric between them and the foundations *in situ*, this band and soffit, since they run completely around the building, may conveniently be likened to an architrave. This 'architrave' of poros, be it noted, was carefully and smoothly prepared with a view to slightness when stuccoed, whereas the unstuccoed surfaces above it were left quite in the rough, as about to be masked in a sheath of veneering. On these unfinished surfaces was applied the terracotta sheathing brilliantly patterned in red, black and buff¹⁰ as follows: (A), a meander or fret running horizontally (and therefore not shown in Figure 2 except in profile) between two containing astragal mouldings running also horizontally (a) and (b), striped both of them in the three colours, (a) being spirally and (b) vertically striped; (B), a pattern of spirals guilloché, or entrained, into a central enrichment of which are introduced, —through regularly recurring perforations, —the fastening nailheads.¹¹ This guilloché covers a broad vertical band shown along the top of I, II, and III,¹² and is contained by two astragal mouldings (c) and (d) striped in the three colours.¹³

Turning now to the surmounting terracotta cornice nailed down along the tops of the veneered blocks I, II, III, note its band (C), and Egyptian cavetto, (D), with the astragal (e) intervening,¹⁴ and surmounted by (E), a narrow

⁹ Its value as a protection, compared with the colours applied on the finished stone, ordinarily in combination with the preliminary layer of fine stucco, remains still a matter of doubt. Probably the veneering afforded the greater protection. Dr. Graef (*Ol. Text* II, pp. 183 f.) indicates that the stucco surfaces were less weathered where red had been applied than where blue had been used.

¹⁰ Coloured plates are accessible not only in *Ol. Pl.* II, Pl. xxvii, but also in Hammeier's *Denkmäler*, Pl. xlv, and in Meyer's *Konservationstechnik*, s.v. Ornamente, Fig. 23, Pl. I.

¹¹ Almost exactly this guilloché is shown on the veneering of temple 'C' at Selinus (see Hammeier, *l. c.*). See also Dr. Graef (*Ol. Text* II, pp. 188 and 200, Fig. 29) on the oldest specimen of veneering found at Olympia (but not assignable to any known fabric), which shows a very similar but less enriched guilloché. As for the fastening nails, note that this combination of (a) (A) (b) (c) (B) (d), —a narrow horizontal fret (A) underchanging a vertical guilloché (B) each running between two astragal mouldings (a) and (b), and (c) and (d), —is all of the terracotta sheathing that showed — a third and not visible surface, however, remained, and this was undecorated. Through

this was driven vertically into the poros blocks below a row of nails which made doubly secure the whole of the veneering, —attached already by nails driven horizontally through perforations in the vertical guilloché band. To this top veneering surface was applied, so as to project backward beyond it, another blind (undecorated) surface, —the horizontal foot of the terracotta cornice. Where this backward-spreading foot stretched clear of the top veneering surface underneath, a row of extra long nails was driven vertically into I, II, and III (see Fig. 2).

¹² On III this vertical guilloché slanted upwards to form the obtuse angle of the pediment.

¹³ The lower astragal, (c), running below the guilloché, i.e. above and alongside of (b), exactly reproduces (a), except that its stripes are wider.

¹⁴ Cornices of this profile, with the Egyptian cavetto, though not further exemplified at Olympia, have been found at Gela and Syracuse, and one such is in the Palermo museum (see Hammeier, *l. c.*). Most Olympian examples, however, show instead of the cavetto between two bands a *cyma reversa*, with or without a band below, surmounted along the

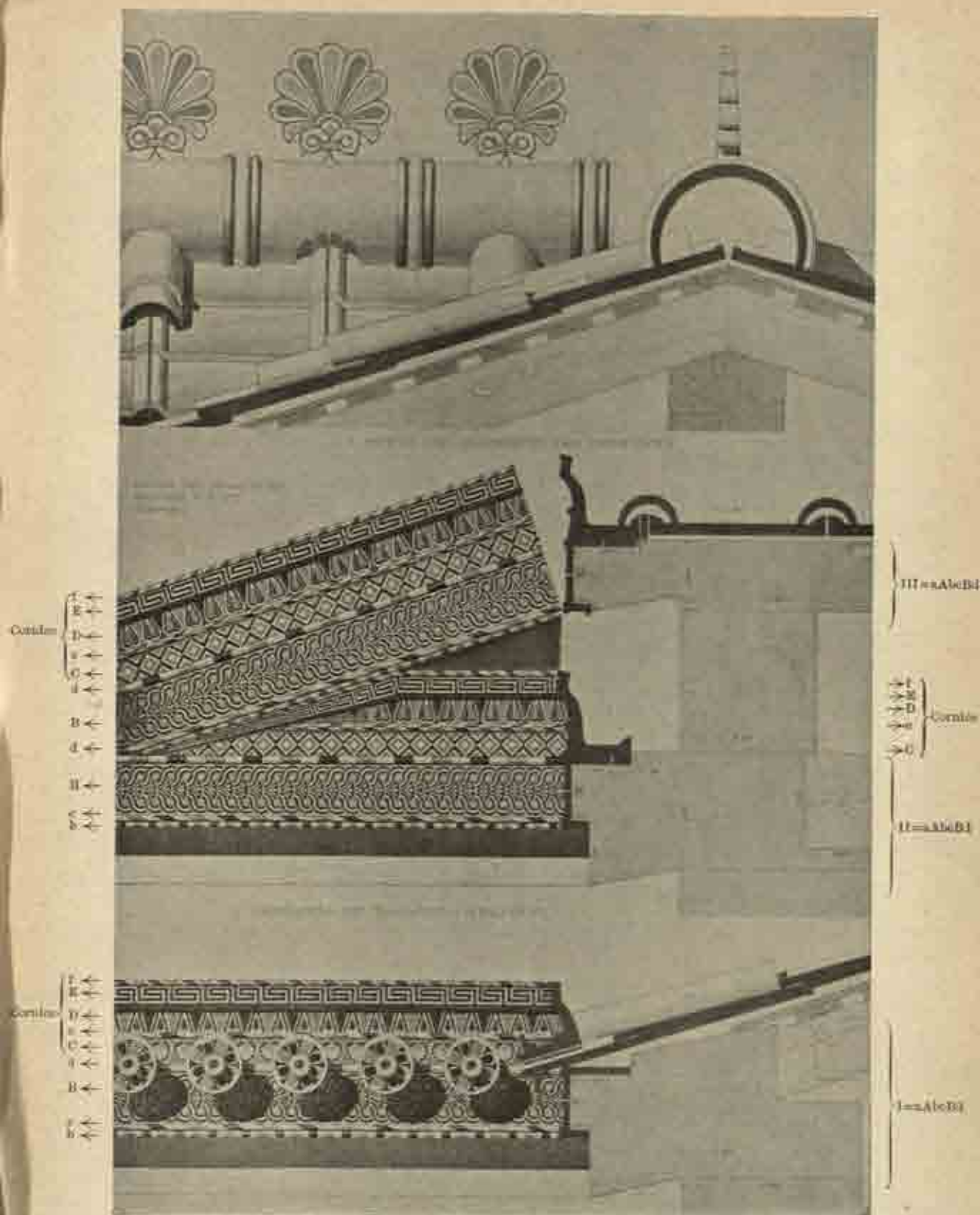


FIG. 2.—THE OLD GREDAANS' HOUSE (XII). VENERABLE ESTABLISHMENT-BLOCKS, CORNICE AND ROOF-TILING.

fretted band contained at the top by (f), an astragal moulding striped and proportioned exactly like (a). Along the eaves, the band (C) with projecting waterspouts releases the rainfall, and masks the outward edge of the lowest course of roof-tiles. Here, being important, it is variegated not only by its striking pattern of reversed palmettes, but also by its waterspouts—a row of anemone-like discs painted as rosettes with red (mottled clay) campanula-shaped water conduits debouching at the centre. Below runs (d) and above (e). When we come to the pediment, where waterspouts are of course inadmissible, this band, losing with them its relative importance, carries instead of inverted palmettes a more monotonous and formal lozenge pattern.¹⁵

Such were the entablature and cornice, and such was the roof¹⁶ of the old original Geloans' treasury-chamber, which measured 10.85 (11.16) by 13.17 metres. Little or nothing else about the fabric above its foundations is known,¹⁷ except that Pausanias saw the inscription on it, and did not see the statues once housed within its walls.¹⁸ What manner of entrance it had, what was the purpose of the quadrangular holes with which its limestone floor is honeycombed (see Fig. 1), whether it originally had a portico or porticoes on the east and west, what manner of walls supported its entablature, all this is quite unknown. Shewing no triglyph or other frieze, the Geloans' superstructure cannot be classed as Doric. If, however, its Dorism could be asserted because the sons of its builders' grandsons added a Doric porch, then this entablature, being what Palladians used to term, in discoursing of the Etruscan order, an 'architrave cornice,' might figure as a missing link, the friezeless Doric, corresponding to the friezeless Tuscan order.¹⁹

eaves by a row of alternate waterspouts and antefixes.

¹⁵ See *Ol. Text II*, Fig. 8, p. 193, for evidence that a chequered pattern, of simpler decorative effect than these lozenges, may have supplanted the reversed palmettes on band (C) along the northern side, where it presumably showed waterspouts.

¹⁶ The Geloan scheme of roof-tiling has been reconstituted (Figure 2 top): along the ridge-pole were laid large and all but cylindrical tiles, serving as *imbrices* to the topmost rows,—one on either slant,—like of *tegulae* and *imbrices*. These enormous ridge-pole tiles were joined each to each by three under and overlapping rings or vertical readings, embossed; and each of them raised skywards an enormous palmette spreading lengthwise of the ridge-pole. Viewed from many points on the Acropolis during the century before the south porch was added, the effect of this aerial row of enormous flower-like palmettes must almost have suggested,—but for different colours here,—a dress-parade of marshalled *paradeas*. The ordinary roof-tiles (*tegulae*) were not convex but flat and quadrangular (nearly 2 feet square). Except for

their under and overlapping tops and bottoms, these were bedded in clay, and the tops of the uppermost courses on either slant met at an obtuse angle on the ridge-pole, under cover of its mammoth *imbrices*. The contiguous sides of all the rows of these *tegulae* were modelled with up and outward-curving quadrant-shaped edges, and each neighbouring pair of these edges formed part of a semi-circular rib or ridge (running from eaves to ridge-pole) down which rode semi-cylindrical rib-tiles (*imbrices*). Semi-circular arched voids shewn on either side in the lower edges of the mammoth ridge-pole *imbrices* admitted the insertion of the upper ends of the two top rows, one on either slant, of these smaller rib- or rafter *imbrices*.

¹⁷ See *Ol. Text II*, p. 44, where mention occurs of a shaft with only sixteen flutings found in the east wall of Leo's fort. This (shewn in Fig. 3) belonged, Dr. Dörpfeld suggests, either to the Council-House or to the Old Geloans' treasury.

¹⁸ *J.H.S.* vol. xiv, p. 268, and Pausanias VI, xix, end.

¹⁹ See M. A. Choisy, *op. loc. cit.*, p. 320.

But with no means of discovering the module, there can be little point in classing this ancient ark of the Gelaens as Doric.²⁰

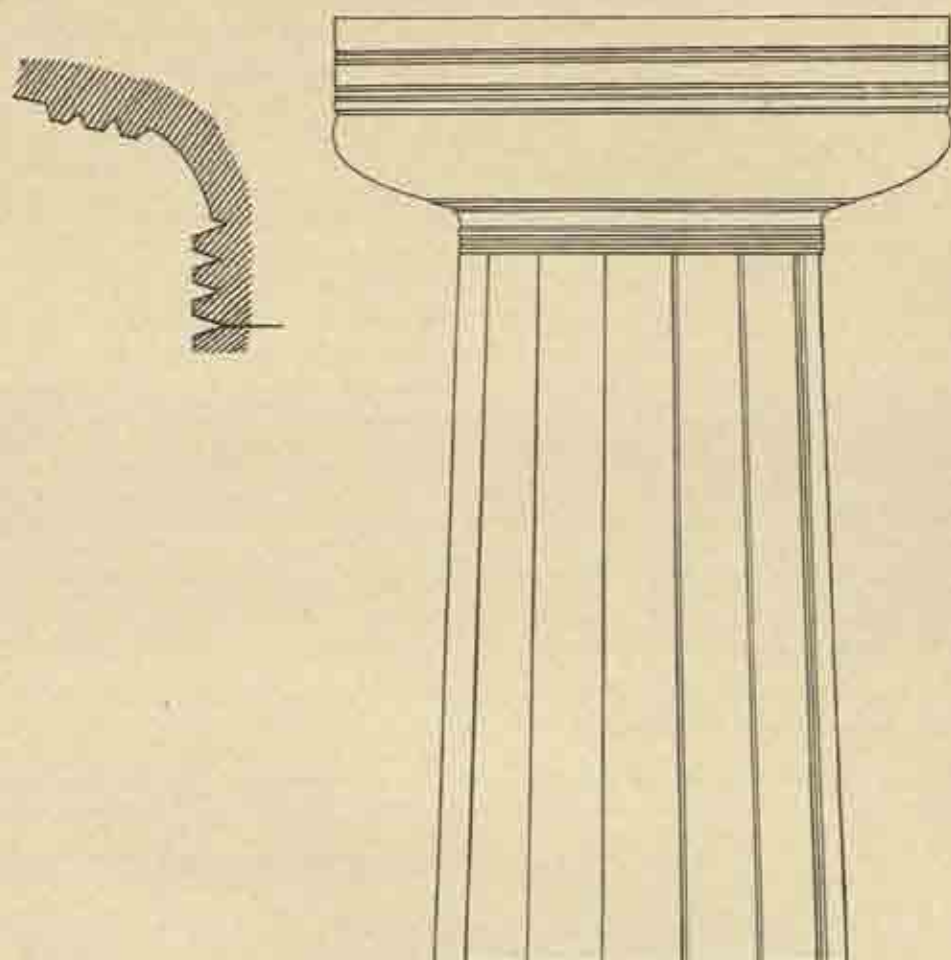


FIG. 3.—ARCHAIC SHAFT (SIXTEEN FLUTINGS) AND CAPITAL FOUND IN THE EAST WALL OF LEO'S PORCH.

The Gelaens' South Porch.—When, however, in the course of the sixth century, a long row of treasures had sprung up on the terrace, all of them in the Doric style, the stamp of architectural Dorism²¹ was set also upon the

²⁰ One final archaism should be noted: neither the foundations nor the recovered entablature stones exhibit marked traces of clamps or dowellings.

²¹ As indicated on p. 46 above, stones constituting a complete Doric entablature with drums of columns appertaining were found in Leo's wall

along with the remains of the older chamber. The triglyphe of this entablature measures 0·513 by 0·752 metre, its webtopes are 0·752 metre square, and the drums show twenty flutings. At the top of the shaft not far from its junction with the capital appear four horizontal flutings or incisions, and the shaft shows pronounced

Geloans' ancient house by the addition on the south of a Doric porch;²² thus too, its entrance was apparently shifted from the east to the south side²³ and conformed to that of the later-built houses west of it. Very practical considerations sufficed in these early days to dictate this addition,—the need of some sheltered *andezvous* for Geloan worshippers, numerous at the time of the chariot victory of Pantares.²⁴ After the era of treasury foundations this need fell into abeyance,—when, the opisthodomus of the great temple of Zeus and various porticoes having been built, there was abundant accommodation in more central parts of the Altis for all worshippers indiscriminately. But the

entasis. The beautiful outline of the capitals shows an overhanging parabolic curve, and striking resemblance in profile to one found at Terra Nova (Gela). See Figure 4, where the proportionally high architrave is also shown, and also its untruncated regulae. Note (*Waggon*, p. 46, Fig. 41) that the sides of the Heratempelion, dating from ca. 550 B.C., also had under its cavae regulae without *guttae* (truncels); these under the pediments being truncated. The Temple at Aegae, the Olympian Council-House and Selinuntine treasury (IX) also (see Ol. Text II, p. 49) omitted truncels on the regulae under the cavae. Above the square metopes of the Geloans' porch, as also above its triglyphs, are the usual mutules, but these again are untruncated. For Athenian fragments of a cornice showing mutules without truncels, see *Waggon*, p. 177, Fig. 179 (a) and (b). The area of the Young Geloans' triglyph is two-thirds of that of the metope. For marks of the claspings used, see the corner metope (Fig. 4). Two sorts were used: (1) the ——— shaped, probably of metal, and (2) those shaped like the head of a rudimentary double-axe, probably of wood.

²² This whole Doric superstructure (see note above) belongs certainly to the porch-foundations *in situ* (see Fig. 1), as Dr. Dörpfeld has demonstrated: supposing it had ten triglyphs measuring as above, its south frontage works out at 13.17 metres. Six of the seven columns and capitals found are thus bestowed,—with the intercolumniations (2.58 m.) suggested by their diameter,—along the south face or front. The seventh and a missing eighth stand behind the five and sixth (the corner) columns of the front row and in front of the two half-columns and capitals (see Fig. 4), applied respectively to the south-east and south-west corners of the old treasury chamber. The southward extent of the foundations on the east and west allows just room for the footing of two columns and a half with two intercolumniations; hence the demonstration is complete. The score so became,

among the peros-fragments of the porch, are two half-capitals (see Fig. 4) applied by the young Geloan builders to the two southern corners above mentioned. All the other aenae capitals recovered had indeed been roughly halved by Leo's builders for easier transportation and handling use; but these two, far more carefully dressed at the back, were unmistakably washed with the regular stucco of Hellenic builders not in front only but partly also at the back,—one of them at the right and the other at the left hand end (see Fig. 4). This proves that they were the half-columns of half capitals slightly projecting respectively beyond the east and west walls of the original chamber.

²³ See *J.H.S.* xxv, pp. 297 f., 299, note 19, 302, note 19, 304, and 306. For the existence of any sort of entrance there is unfortunately no proof or evidence whatsoever.

²⁴ The date, not far from 590 B.C., suggested for this porch (*J.H.S.* xxv, p. 297 f.) needs no confirmation by a supposed new departure in the footing of the porch foundations. Here is undoubtedly a substratum of broken field stones entirely dispensed with by the Old Geloan chamber and by all the older treasuries adjacent (except No. X, the Metapontine's house), but used by the five westernmost and latest built; but see below, notes 25, 72, and 79. The subsoil in front of the Old Geloans' chamber was evidently considered unstable and the architects very sensibly had recourse to footings which were not needed, and therefore not used, by the builders of the chamber. The Young Geloan foundation courses thus bedded are, however, quite out of joint with those of the older chamber, and the three contemporaneously built steps surrounding porch and chamber alike are hopelessly out of joint with the floor of the chamber though not with that of the porch; on the west the chamber floor lies wholly below the top step outside. This is good evidence confirming the fact otherwise established that the Young Geloans' porch was a later addition.

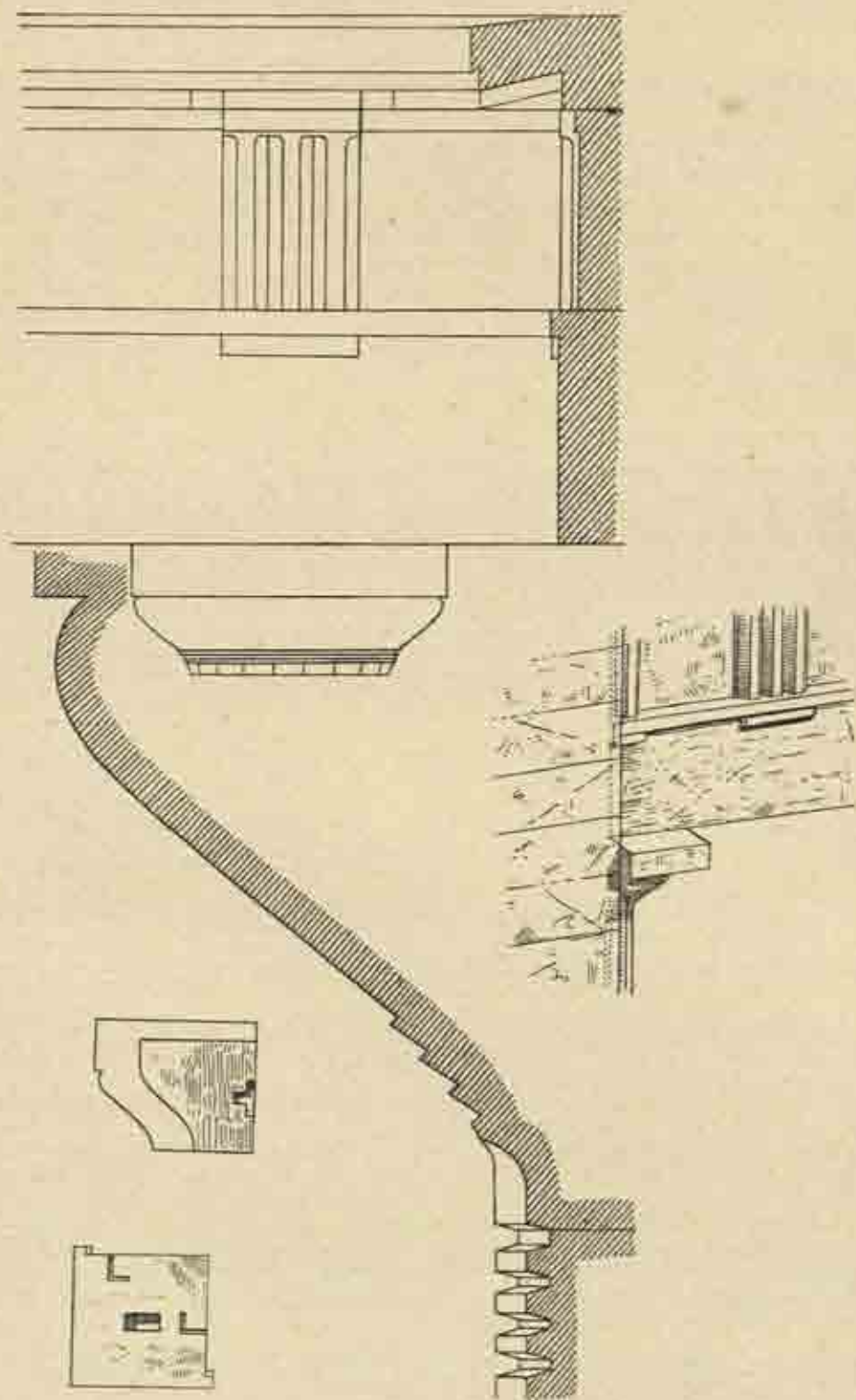


FIG. 4.—THE YOUNG GELOANS' PORCH.

Young Geloans could not foresee what was coming, and were at pains to make their porch long enough,—witness the overlapping of their half columns applied to the two southern corners of the old chamber or cella (see note 22, above, and Fig. 4).—and deep enough to make sure of elbow room (see Fig. 1 and note 21, above). The six columns of this porch were surmounted not by a pediment, but by what was almost a 'lean-to' roof; one so nearly flat that it scarcely could be seen even if you stood on the terrace in front.²⁵ This roof abutted at right angles upon the lowest and undecorated band of the Old Geloans' entablature. Thus the veneered surfaces of the old chamber with the ornamental cornice above them and the ridge-pole palmettes still higher, on the sky-line, fairly dominated this later porch. Evidently there was no desire on the Young Geloans' part to hide the brilliant handiwork of their pious forefathers.

*The Metapontines' House, No. X.*²⁶—It is probable²⁷ that the Metapontines' treasury was built next after the old Geloans' treasury-chamber, and long before the young Geloans' porch. Its cella measured 8.30 by about 9.60 metres, and its vestibule was upwards of 2 metres deep. For its foundations see Fig. 1. Careful scrutiny of these, though it raises difficulties, favours the idea that X was built before XI, and next after XII.²⁸ Near them, and no doubt originally built into them, were unearthed, in fragments, triglyphs and metopes of a friable and marly limestone,²⁹ the attentive study of which reveals several experimental variations through which the evolution of the Doric style at Olympia

²⁵ The conclusive evidence of this derives entirely from Dr. Dörpfeld's discovery, *Ol. Text* I, p. 54, on one of the recovered entablature-stones of the Old Geloans' chamber, class I, of a mark of the abutting porch roof with the inconsiderable slant of 1:9.

²⁶ *J.H.S.* xxv, pp. 294 ff., with n. 3, 300, 312, with n. 45 and 317.

²⁷ *J.H.S.* xxv, p. 298. See also U. von Wilamowitz-Moellendorf's *Herkules* (1895), I, pp. 10 f. and n. 22.

²⁸ Unlike the five nearest treasuries, including the Old Geloans' chamber, but like the five treasuries furthest off and the Young Geloans' porch (see above, note 21 *ibid.*), the foundation walls of X are bedded on rough stones laid in clay. Is X on this account of even date with these last? No, for the use of footings was not a question of date but of varying stability in the subsoil of the Olympian terrace. The architects concerned on and all determined for or against footings in the most sensible and practical manner, though not (cf. the case of VII and V) with invariably fortunate results. Experience showed that the subsoil at the back of the terrace and east of VIII was solid, but that footings were everywhere needed to the west of it (see above, note 23, and below, note 72

and 78 *ibid.*). In sum the boulder-stones under the foundations of X far exceed all others on the site, excepting those on which the Heraeum walls were bedded (*Ol. Text* II, pp. 59 and 28). As in the case of the Heraeum and of treasuries I and II (III and V being out of the count for lack of evidence) and IV having footings under all its walls, these unfashioned footings of X are entirely absent at the north end, and gradually show themselves toward the south end, where they reach to a considerable depth. They contain sporadic fragments of sandstone and poros. Above them runs the topping-off course (*eidmāripa*) of dressed blocks, which, being of rather coarse Olympian poros, contain many shells. Neither these nor any other blocks recovered show the least traces of any use of clamps, a note which they have in common with the stones of the Heraeum and of the Old Geloans' chamber, but the rough inner dressing of those courses shows that they were laid below the interior floor-level of the cella.

²⁹ Having served originally as part of X, these fragments may have been built into the foundations in the course of latter-day repairs: they may be stones rejected by the original builders. In either case their study is of the greatest importance.

had to pass before reaching the harmonious regularity of Libon's great temple. One of these (see Fig. 5)—a metope fragment—shows at the back the profile of a cornice with a soffit of only 0.124 metre.²⁶ With this stonemason's blunder is to be taken into account the startling experiment (also shewn in Fig. 5) on the frieze of the Metapontines. There, entirely replacing the abacus and the taenia of the developed Doric frieze, is shewn, running along the top alike of metopes and triglyphs, a rudimentary cornice (suggestive of the Old Geloans' veneered soffit, shewn just above their apology for an architrave), the total projection of which is not quite half 0.124 metre,—that of

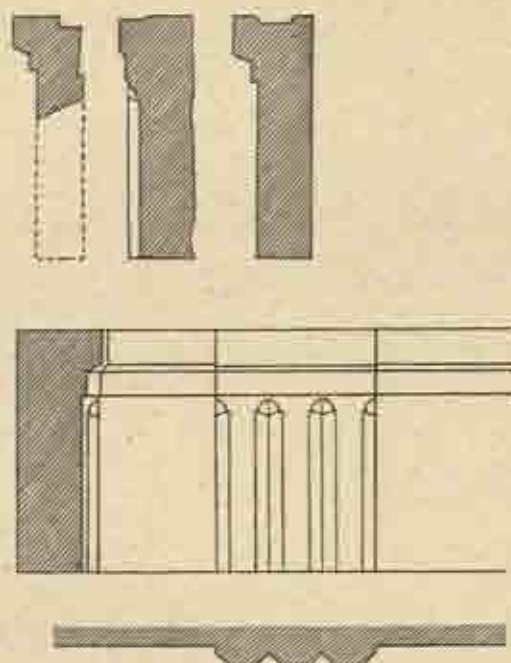


FIG. 5.—FRAGMENTS AND RESTORATIONS OF THE METAPONTINES' FRIEZE.

the eccentrically dressed fragment just discussed. Made here in an extreme form, this experiment was repeated by the Sicyonians in a much reduced and restrained form, and so successfully that it influenced the builders of the

²⁶ Begun apparently as a cornice by a muddle-headed workman, this block was presumably afterwards taken in hand for a metope; but an odd point is that 0.124 metre should have been deemed by any one, even momentarily, to be the right depth for the soffit of a cornice. Possibly there was confusion between the notion of a cornice strictly so-called and that eccentric and experimental cornice projection shewn along the

top of the triglyphs and metopes in X. But see *Ol. Pl. i*, Plate xxxv for details of a cornice, possibly belonging to one of the treasuries, the total projection of whose soffit is 0.106 metre; and note that just such a cornice would have suited a facade crowded in close to an older one, as was the Selinuntines' treasury (*J.H.S.* xxv, pp. 294 and 298), No. IX.

Parthenon.²¹ Another sign of the fluid stage of archaic Olympian Doric, when the Metapontines built what was the earliest Doric entablature of stone at Olympia, shews in the curves of the glyphs of this same frieze.²² Data for determining the intercolumniations and the number of columns²³ are entirely lacking, as are also discoveries upon which to base any theories as to its decoration with terracotta or otherwise.

*The Megarians' House, No. XI.*²⁴—Of the Megarians' house nothing remains on the terrace except the foundations²⁵ and portions of the cella walls (see Fig. 1) from which to gather any information;²⁶ but a discovery in the south-western corner of the Altis has made all the difference, transforming these foundations of the north-eastern corner into those of one of the best-known fabrics of Greek antiquity. At the southern end of the west wall of Leo's fort were found (a) stones from the stylobate, (b) drums and capitals, (c) blocks from the architrave, notably the central one that stretched across the void between the two columns in *antis* bearing, in characters of the Hellenistic age, the inscription ΜΕΓ[ΑΡ]ΕΩΝ, (d) triglyphs and metopes for the frieze,²⁷ (e) portions of the

²¹ See *J.H.S.* xxv, p. 299, and the account of the *Sieyonians' house*, p. 83 below. Although the *Sieyonians* used no cornices, but confined themselves to a simple astragal moulding, they nevertheless preserved the idea of a slightly and fair-sized detail, which should serve to give a visible continuity to the frieze, too much broken up otherwise by the ingeniously contrived proportions of their abaci metopes and triglyphs (see n. 121 below). Reflect that the Metapontines' house, since the old Gelons' treasury-chamber was not Doric, while the characteristically Doric features of the Heraeum were presumably in wood, was the earliest Doric fabric at Olympia made of stone, and the overdoing of this experiment with its frieze will explain itself.

²² Their tops shew something hardly distinguishable from the roundest of 'pointed,' or the most pointed of round arches (see Fig. 5, and note the narrowing of the aperture subtended by the curve).

²³ There were almost certainly fewer than four. Dr. Dörpfeld hesitatingly suggests two, required for a *temple in antis*. This involves three triglyphs on the frieze above the void between the columns. Three columns, but for the awkwardness of the approach involved, would answer the dimensions best (*Ol. Text* ii, p. 50). The Olympian Council-House certainly had three columns in *antis*, and for an archaic Athenian building 'B' in Doric style with three columns in *antis*, see *Wiegand*, pp. 153 to 162. Between the Olympian Council-House (its older and northern wing that is) and the Metapontines' house there cannot be much difference as

to date; but Dr. Wiegand's fabric 'B' was apparently built considerably later even than the latter. The awkwardness of three columns in *antis* might be regarded as a final proof of the archaic and experimental character of the Doric of the Metapontine treasury-builders at Olympia.

²⁴ *J.H.S.* xxv, pp. 294 ff., 298 f., 302 f., and 306 f.

²⁵ XII and X are not far from equilateral, but XI, lying between, is roughly twice as long as it is broad (6.80 by 12.29 metres), XII being the only one more nearly of these proportions. In its smaller dimension, XI is less by a third than X, and less than XII by two-fifths, whereas X, XI, and XII are practically of the same length. These facts support the view that XI was founded after XII and X, having its breadth determined by the available space remaining (*J.H.S.* xxv, pp. 298 f.). Differences of level doubtless located it nearer to X (within 1.60 metres) than to XII (within 3.90 metres). Note that the foundations of XI, though carelessly laid as regards the walls above and without footings, were strengthened with care at the two southern corners.

²⁶ For the semi-detached foundations of an altar adjacent see *J.H.S.* xxv, pp. 306 f.; cf. also Dr. Dörpfeld in *Ol. Text* ii, pp. 41 and 51, and p. 78 below.

²⁷ Each component block consisted of a metope and its adjacent triglyph. This same combination occurs sporadically (*Ol. Text* ii, p. 7) in Libon's temple, and the limestone frieze blocks on the sides of the Athenian *Hekatompedon* were thus combined (*Wiegand*,

cornices both horizontal and upslanting. (*f*) tiles from the roof, and, last but not least important, remains of five sculptured blocks: These last filled the

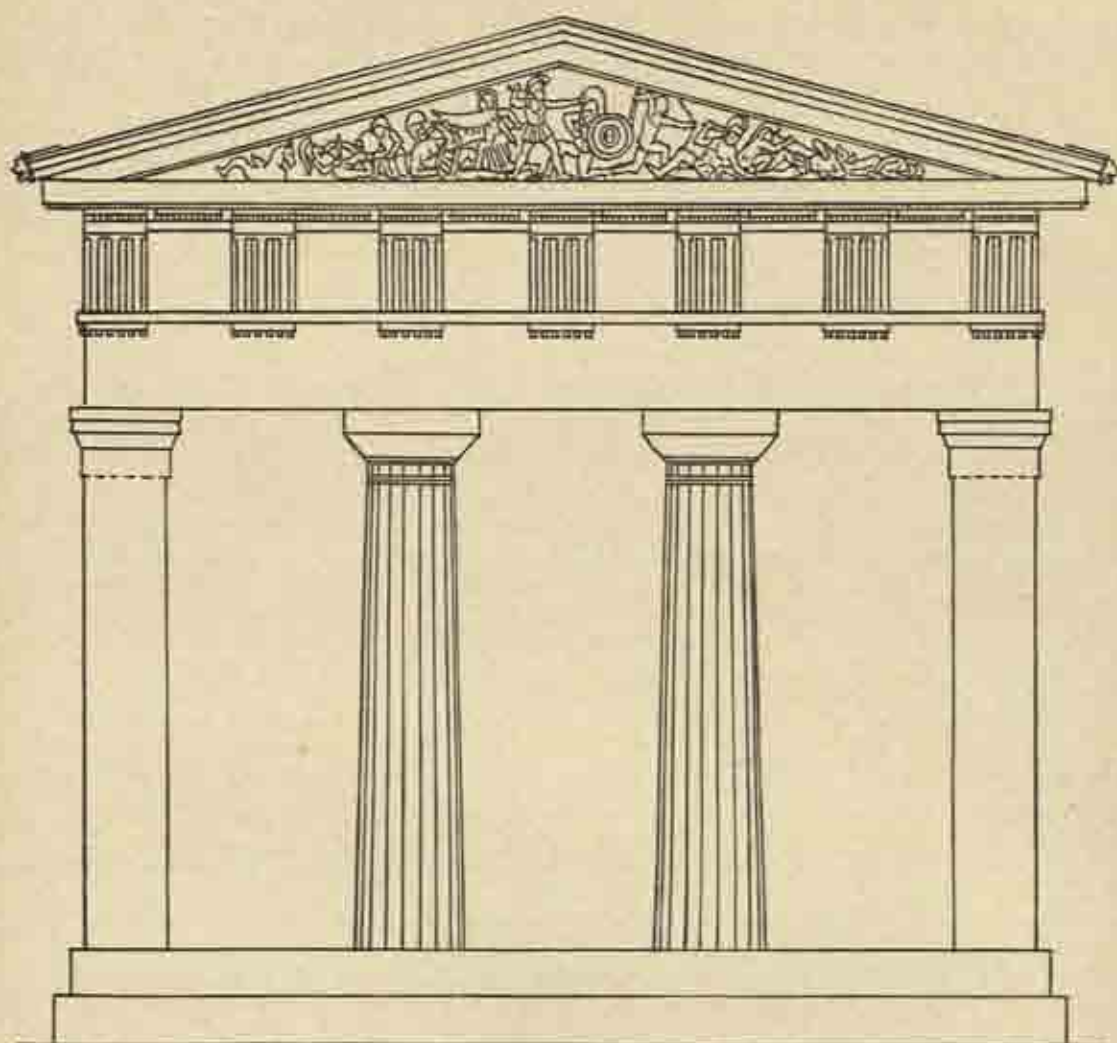


FIG. 6.—RESTORED FRONT OF THE MEGARIAN HOUSE.

tympaunum and, when closely scrutinised,²⁷ are found to represent in archaic

p. 12, and see p. 145 f. for the same fact regarding fabric 'A'—the most archaic of the minor buildings considered by Dr. Wiegand). These facts indicate such combinations as we have and as by no means confined to diminutive buildings, and go far to raise again the question whether the Doric triglyph can have the origin assigned to it by Vitruvius (IV,

2, 2). Were triglyphs really in origin masks for the ends of horizontal beams? As Dr. Wiegand pertinently observes (p. 60), the whole question of the prevalence of all-wooden construction during the sixth century B.C. requires detailed investigation. But whence are the necessary facts to be derived?

²⁷ The total length of these fragments fitted

style the battle of the gods and giants, mentioned by Pausanias as adorning the pediment of the Megarians' treasury.³⁸ Owing to a split in one of the recovered drums,³⁹ the height of the columns can only be approximately fixed at 3.50 metres; but they certainly shew (see Fig. 6) no traces of entasis.⁴⁰ Although no stone of either anta has been recovered, the restoration as a temple *in antis* is quite assured. Neither architrave, nor frieze, though both are shown conspicuously together below the pediment (see Fig. 7), appears along either of the sides,⁴¹ an additional proof, if one were needed, that the Metapontines' adjacent house was already standing to mask the western side of XI when the Megarians built it.⁴² At the two south corners appeared, however, two incipient metopes running for a short distance along each one of the sides, and suggesting an unseen continuation of the frieze, the absence of which could only be detected from very few points of view.⁴³ Another experimental singularity at the corners of the entablature is apparent in Fig. 7.—the ingenious complication of junctures for the stones meeting at the corners, so contrived as to avoid their all coming together diagonally on the same vertical plane.⁴⁴

The same experimental economy of labour, which dispensed with both architrave and frieze along the sides where their absence could escape obvious detection, shews also in the dressing of the Megarians' column-shafts (see Figg. 6 f.). Roughly dressed for the incision of twenty vertical flutings, they shew

together tallies with what the foundations of XI require (see Ol. Text III, pp. 5 ff., where Dr. Treda gives an account of them).

³⁸ VI, XIX, 13: τοῖς Μεγαροῖς τῇ ἀρχαῖᾳ τῇ ἀντὶ τοῦ ἱεροῦ τῶν θεῶν καὶ τῶν ἀνδρῶν.

³⁹ Proved by the cumulative evidence of numerous baling measurements and agreements otherwise, the appearance of the remains (a) (c) to the Megarians' foundation is perhaps most strikingly evidenced to the casual eye by the fact that there are recovered drums fitting exactly weathered outlines still visible (in the sightline) on the stylobate *in situ* (Fig. 7).

⁴⁰ A fact, disconnecting to the theory that excessive entasis must be regarded as the note of excessive archaism (see below, page 81).

⁴¹ Dr. Wegand (p. 39) cites this treasury as resembling the Heratempelion in having a frieze, but no architrave, along its sides. Plainly his reference is to the Sicyonian treasury (I), not to XI. See below, p. 76.

⁴² An interval of only 1.60 metres separated XI from X. The Sicyonian's house, on the contrary, where the frieze but not the architrave was continued along the sides (see the note preceding) was masked on the west by no building whatever. The architrave was apparently not deemed an essential for the eye as the frieze and therefore dispensed with in I as in XI.

⁴³ This illusion was enhanced by ending the incipient side metope downwards with half a regula and three trunnels; nor was it presumably greatly interfered with by the entire absence of any corresponding half metope under the corona above. See Fig. 7, where is also shown, upside down, one of the two corner antae with the corona appertaining. Notice the rectangular termination of the front metope, and the sharp diagonal ending of the soffit from which it depends.

⁴⁴ This triumph of delicate adjustment is masked on the outside, but shews from within. Note also the —| shaped clamps of the entablature, which also appear elsewhere throughout the superstructure. No clamps or dowellings were used in the foundations. Horizontal commissures shew no rabbetings, but smooth faces; vertical commissures are so rabbeted as to leave broad lands on all edges. All commissures are more than occasionally covered with the same stucco used for the outside faces,—a sure sign that each stone was individually stuccoed before it was put into place. Incisions made for the claws of lifting-irons occur in many stones, others were apparently handled with levers and inclined planes. The prevailing poros is frequently patched with marly limestone, many trunnels being of that material and patched in with haul.

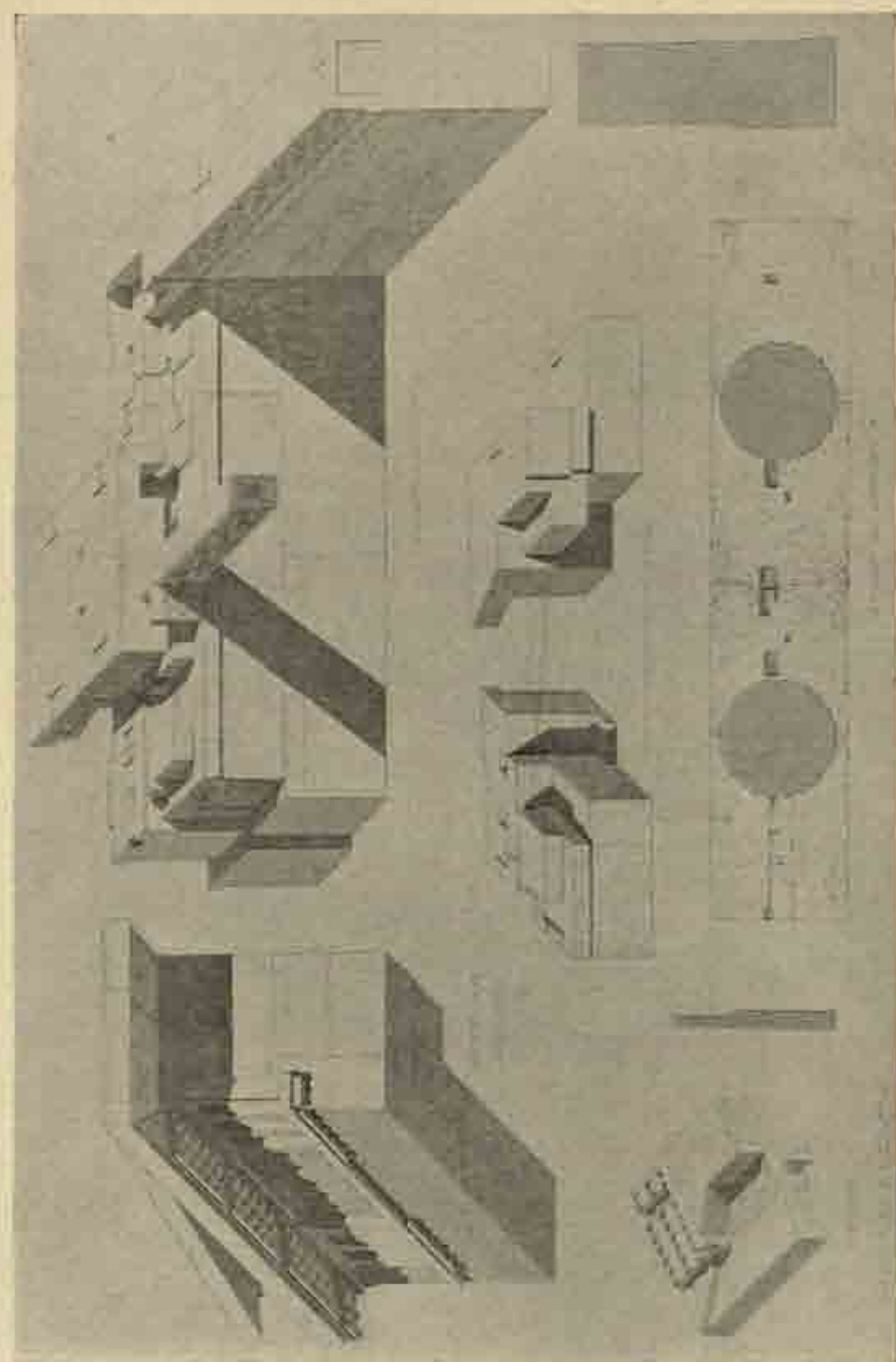


FIG. 7.—DETAILS OF THE MEGARIANS' HOUSE.

only the eleven visible from the front;⁴² and, instead of the nine remaining, nine flat unfluted vertical faces such as would belong to a polygon. Moreover the three parallel incisions or horizontal flutings, at the top of the shafts (see Fig. 6) near the capitals, extend also only half-way round so as to shew from the front. The capitals themselves were dealt with more 'sincerely'; the curve of the echinus, which,—as is the case of Libon's temple and of the Metapontines' house,—is parabolic not elliptical, shews above four annulets ending each capital downwards. The abaci were presumably of the more extensive archaic type. Neither capitals nor metopes reveal traces of colour.⁴³ The surmounting cornice of terracotta painted with palmettes, and moulded into an archaic profile,⁴⁴—a lower flat band topped by a convex curve that suggests the *opisthodomos* of later days,—was confined to the pediment,⁴⁵ and quite

⁴² See *Wiegand* (p. 174 and Fig. 73 b), for a discussion of a Doric capital of yellow poros that shows only nine flutings. Dr. Wiegand intimates that it must have stood against a wall. Thus it would have formed a startlingly 'rococo' feature in any conceivable archaic fabric of Doric style; but does not this Olympian analogy go far towards invalidating Dr. Wiegand's *obiter dictum*?

⁴³ Plain marks of a dark blue encaustic colour shew on the triglyphs, regular metopes, and all trunnels. Traces of red have been detected on the upper members of the architrave, on a narrow horizontal band below, and on the interspaces between the metopes as well as on the 'tenia' or narrow horizontal band just above the regulae. These brilliant colours were also applied to the pedimental sculptures. Dr. Graef's plate (number xiv in Hamplater's *Deskblätter*, where it figures as the 'Corner of a Doric temple in *antik*') in Dr. Boermann's article on *Polychromy* represents the Megarians' Olympian house with unimportant variations as follows: no suggestion of the pedimental sculptures is given, the capital of the anta is purely hypothetical in profile and decoration, and from the side must be entirely expunged the whole frieze with triglyphs, metopes, metopes, regulae, trunnels and all their appointments, while a half metope and unmodelled regula must be substituted at the corner. Dr. Graef has well given the flat terracotta band making the cornices of the Megarian sides. It was painted with a feet and surmounted with terracotta palmettes as antefixes. These occurred at intervals, one for each downstanding ridge of imbrices (*καλυπτέραι*). The intervening regulae abutted on this plain fretted band, which had no waterspouts except at the corners. Then, reproduced by Dr. Graef, as well as the scale allows, were remarkable lion's-head waterspouts. Masking laterally the beautifully

profiled and decorated terracotta mouldings applied to the upstanding pedimental cornice,—whose acroterion was a shield taken from the Corinthians in some dateless encounter (see Pausanias VI xix 18 and *J.H.S.* xxv, p. 303),—these wonderful lions show two crescent-shaped ears upstanding among the flame-like waves of a mane as radiating from the face as a centre that gives life to an animated palmette. This truculent replication of the palmette antefixes and the palmette pattern on the pedimental cornice, being itself conventional, is effectively blended with the conventional treatment of the hair about the lips. Here the colouring is dark blue, and produces a thrilling impression of fierceness. For a most elaborate restoration in colours, see *OL. Pl. II, Pl. xix*, which should be carefully compared with Fig. 9 in *OL. Text III*, p. 13, where Dr. Treu figures it uncoloured and unrestored. This lion shows all the elements that were finally blended and glorified in the finest marble waterspouts of Libon's great temple. Perhaps even the lion's head still visible on the north-eastern corner of the Parthenon may be called its final descendant. The closest parallel to it, however, derives from Sicilian Himera, and may be seen in the Palermo Museum.

⁴⁴ Nothing of this could be shown in Fig. 6. For the preparation and painting of this cornice, see above, note 7. The native clay used by the Megarians was coarse. They did not, like the Old Greeks, fasten their cornices down with nails, but used a perforation 0·00 metre in diameter which tunnels through all the recovered pieces. Some sort of lead or rod was apparently inserted here and the cornice was by that means made secure. Just how this was done is not plain.

⁴⁵ The small scale of the pediment, as shown in Figures 6 and 7, has involved the entire omission of this palmette pattern; but it

outshone the plain fretted band running along the sides in continuation of the lower member of the pedimental profile. Indeed this pedimental cornice fulfilled for the Megarians just what the Old Gelous aimed at with their Egyptian cavetto, only the Megarians, being here as elsewhere of a frugal mind, confined this splendour to the place where it would make the finest show, and the resulting total effect more than justified their parsimony. Their example was followed in this particular by the builders of the Parthenon, but not by Libon in ornamenting the great temple of Zeus, which, in this decorative⁴⁰ detail, aimed at the archaic effect dear to the Old Gelous. The whole scheme of the ceiling of the Megarians' vestibule or pronaos has been reconstituted in connexion with a series of parallel and narrow rectangular compartments or caissons formed by eight wooden beams stretching across from the front cella wall to the back of the entablature above the columns⁴¹

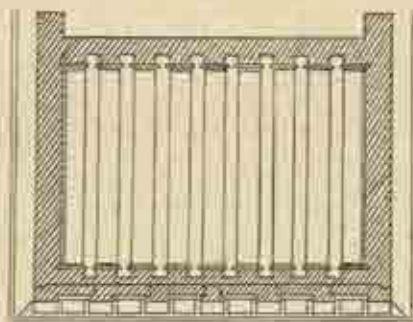


FIG. 8.—RESTORED SCHEME OF THE MEGARIANS' PRONAOS CEILING.

entis, and the two corresponding stone beams (*Ortbalken*) topping the lateral inside walls (of the vestibule: see Fig. 8⁴²). The cardinal discovery for restoring the palmette decoration was its appearance, without any trace of the

appears repeated on a wholly flat band in Fig. 7 as the decorative interior edge of the pronaos, and is admirably shown in Dr. Graef's plate (see the preceding note 46). The Megarians' cornice-profile—two surfaces, the under one flat, the upper one outswelling,—painted with alternately upright and reversed palmettes and lotuses, was practically reproduced in the painted marble cornice,—diversified by water-spouts, along the eaves of Libon's great temple; its pattern but not its profile shows with an insignificant variation for the worse (a fiddle-triangular of spirals) on the Selinuntines' temple 'C' (cf. Plate XI, Fig. 2 in Ban-
meister). If the date of the Selinuntines' temple is fixed late in the seventh century, then it looks as if the Megarians had improved upon the Selinuntine pattern. Note that this pattern and in general the whole polychromy of

XI was executed in the same three colours already familiar as used by the Old Gelous.

⁴⁰ A practical consideration may after all have played a decisive part with the Megarians as well as with the builders of the Parthenon. Confining the painted cornice to the pediments enabled them to dispense on the sides with a gutter and its waterspouts and to have 'dripping eaves.' Such were equally desirable on the crowded Olympian terrace and the frequented Athenian Acropolis.

⁴¹ At the point of juncture of this stone beam, shown at the top on the right in Fig. 7, notice a narrow vertical cutting obviously suited for the insertion of a thin rectangular piece of wooden veneering. Projecting from the stone beam in which it was bedded this veneering panel was similarly inserted into the next parallel transverse beam. Its insertion

colours, but still most clearly, on one of these two stone beams (see Ol. Text II, p. 52, where Dr. Dörpfeld gives an account of the matter).

As for the roof of the whole fabric, a square seating for its fair-sized ridge-pole shows at the top on the inside of the middle tympanum-block. It may be inferred that the slanting rafters had support from various uprights resting on horizontal beams forming the ceiling of the cella. On these rafters were laid the planks which in turn carried the tegulae bedded in clay. The three recovered tympanum-blocks,⁴⁴ and the sculptured representation in high relief of the battle of the gods and giants, were unearthed where they, along with various terracotta fragments from XII and XI, had been piled in, not far from the north-western angle of the South Portico, to form the 'core' of the last eight metres at the southern extremity of Leo's West Wall. They must have been transported upwards of 250 metres, along with the whole entablature of which they formed a conspicuous part. The group as restored is sketched in outline in Figure 6. As for the use of colours, the background

unquestionably implies the identical inscription between the same transverse beam and the same lateral stone of a second veneering panel in order to close the naos at its opposite end (on the front cella wall). Thus was formed a compartment or *cuison* 0.40 metre wide by 3.44 metres long. This quadrilateral compartment was repeated eight times, for behind the triglyph-blocks of the frieze show not only the square seating cut to receive the beam just mentioned, and shown in Fig. 7, but seven others at due intervals and exactly like it. That all the vertical faces of these eight beams were decorated with the same pattern of alternately reversed palmettes and lotuses, already described as applied to the pedimental cornice, is practically certain, because unmistakable traces of it have been made out on one of the lateral stone beams (*Orthostates*) as shown in Fig. 7.

⁴⁴ These three tympanum-blocks when assembled yield 0.744 metre for the height, and 5.70 metres for the breadth of the tympanum. The horizontal cornice of the pediment measured 6.30, the foundations below 6.80 metres. Three facts, (a) the exact suitability in dimensions of these tympanum-blocks to the measurements of the Megarians' house, (b) the agreement of their sculptures with Pausanias' glance at the Megarians' pediment, (c) the material of (b), which is the same yellowish (travertine) limestone from the Alpheius valley (Dr. Treu, Ol. Text III, pp. 1, 3, and 5) used for the more or less contemporaneous archaic and colossal head of Herakles belonging to the Heraeum, — all conspire to identify these blocks with the Megarians' entablature whose broken bits were recovered along with them: (c) is evidence, though the

entablature is of different and coarser stone, because the trimmings patched in on XI (see above, note 44) are invariably of this same marly (travertine) limestone. Another small piece of evidence depends on the fact that the Megarians' pediment sculptures were not in the round, but in high relief (cf. Pausanias' expression *ἐκτεταγμέναι* ἐν ἀνὰ τὴν γυμνάσιον καὶ θεῶν πρότατοι, see above, note 38). This accounts for the fact, — proved by the otherwise impossible lines of juncture shown by the five sculptured stones, — that these limestone blocks were laid in the tympanum before they were sculptured. Dr. Treu demonstrates this by various detailed considerations (Ol. Text III, pp. 11 f.), e.g. if the blocks had been first sculptured and afterwards hoisted into place, the thin vertical slice of Herakles' breast cut off by one of the junctures would certainly have suffered serious fracture, involving in the process of fitting it on to its continuation on the block adjacent repairs that were certainly never made. That Pausanias' use of *ἐκτεταγμέναι* should imply sculpture of the blocks previously bedded in the tympanum could have been learned of Dr. Schmalz (Philologus xxiv, p. 584), and is also proved by the position and trend of chisel-markings on the blocks themselves. These were made by chisels of more than one width plainly shown and measured on the blocks. Drills were also used for the first rough work on the deeper cuttings. The indications of these pediment sculptures shown in Fig. 6 are obviously insufficient, but they substantially agree with Dr. Treu's final restoration, which has been followed here and should be scrutinised in Ol. Pl. III, Plate II-III.

was of a brilliant lightish blue,⁴² red iron oxide was also used, and the actual state of preservation of all the nude surfaces proves their original protection by colour of some kind all traces of which have disappeared. Male figures alone are involved, since Athena (middle left-hand group in Fig. 6) was draped, and for them something like the orange yellow, 'favouring' red, shewn on the archaic terracotta group of Heracles and the Hydra in the Acropolis Museum must have been used. Although no longer, as when they were first unearthed, the oldest known pediment-sculptures, these Megarian figures have gained rather than lost in interest through the comparisons made possible by discoveries on the Athenian Acropolis. They shew for instance a marked advance upon the obviously more ancient Athenian group of Heracles and the Hydra (not to speak of the more than archaic architrave-frieze at Assos with which there are also points of resemblance), and have even some points of advantage over the possibly contemporaneous battle of the gods and giants on the Siphnians' house at Delphi. But this last parallel is of course comparatively fruitless, because a pedimental group is one thing and a continuous frieze like the Siphnians' is quite another. The Siphnians certainly had superior technique, but perhaps the Megarian sculptor, less preoccupied by purely decorative considerations, has achieved a more vividly dramatic composition. One comparison however is now possible where the Megarians unquestionably have the worst of it—that with the battle of Athena and the giants in the pediment of the remodelled Pisistratid Hecatompedon.⁴³ Though one may contrive to miss in this serenely triumphant Athena and her almost monotonously cowering foes a note of awkward but genuine poignancy present in the intenser Megarians' pedimental group,⁴⁴ yet the later art of the Athenians is incomparably superior for many reasons,

⁴² See above, note 48, at the end. Vestiges of the blue background were detected behind the helmet of Zeus (central group) as well as behind his and his giant antagonist's legs. Red iron oxide was found on this same giant's shield and helmet, on the *chiton* of Aris (right hand corner group), and on the hair of the giant assaulted with club and bow by Heracles (middle right hand group). The same brilliant red also appears on the head, lips, and eyes of Poseidon (hurting Nisyros at his prostrate foe in the left hand corner group). The eyes in all cases are archaically almond-shaped. Black must have been freely used to bring out various details such as toes, hair, and the like; the more so because, though several bits in high relief were pieced on, resort was not had, as in the Arginetan pediment and elsewhere, to bronze appendances or details of any kind. Note that Athena's bare left foot must have been of some light colour.

⁴³ See *Hégyand*, pp. 129-147, for Professor Hans Schröder's account of it.

⁴⁴ No very strict comparison can however be made, since both groups as recovered are about equally incomplete: at Athens (*Hégyand*, p. 196) two auxiliary gods with their defeated giants are missing, while at Olympia nearly the whole of every one of the victorious gods is the result of Dr. Tren's well inspired genius for restoration (see *Ol. Pl.* iii, *Pl.* ii-iii, where the restorations are minutely indicated). In what remains of young Heracles are vivid intimations of spring and power, and the relief of forward occurring Aris gives a hint of formidably compressed energy; but the vanquished giants really remain in possession of the field, though the evidence is good, shewing that Poseidon, himself guessed at more than seen, is hurling Nisyros, and that Athena's left foot was certainly planted on the fallen giant's right leg near a gaping wound made just in front of it by the onset of her spear. Both Zeus and his thunderbolt are conspicuously absent, so that the study of the giants' varied figures (alike only in that each one is paralysed by the terror of impending destruction) is about all that can be safely indulged in; the one

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of which one has to do with their use of marble instead of the Megarians' limestone. But the most obvious one certainly is the ludicrously diminutive scale forced upon the Megarians by the size of their Olympian house. Their gods and their giants are not quite half life-size, whereas the Athenian figures are much over life-size, the Athena being over life-size and seven and a half heads high at that, and the giants being represented not only in proportion, but as real giants. Turning to a comparison more to our Megarians' advantage, note with Kekulé a certain resemblance between the Heracles here and the Heracles of the well-known Selinuntine metopes of temple 'C'. A compendious vitality,—gained at the expense of delicate finish, no doubt, but still achieved,—characterises alike these Megarian sculptures, and those of Selinus, a granddaughter colony.⁵⁵ General comparison of the composition in hand with larger and later pediment sculptures reveals a neglect in the smaller work of strict symmetry such as is found alike in the Pisistratid, the Phidian, the Aeginetan, and the great Olympian pediment groups. In dispensing with a central figure, the Megarians were but cutting their coat according to their cloth; and so escaped the snare of triviality so hard to avoid with diminutive figures and small space.⁵⁶ To have pediment sculptures at all for so diminutive a building may have been the Megarians' new idea; the still better plan of entirely dispensing with pediment sculptures was the new idea of a later day, though but a reversion to the practice of the Gelcans and the Metapontines.

*The Cyrenaean House, No. VII.*⁵⁷—After the Megarians' treasury had occupied all the available⁵⁸ space between the ancient altar (VIII, cf. *J.H.S.* xxv, p. 294) and the Stadium, communities seeking good sites for new communal houses began⁵⁹ to build west of the altar.⁶⁰ The Cyrenaean came

before Zeus takes his death with a brutally comatose grimace, the victim before Heracles lies in a disjointed heap, Athena's foe lies paralysed by her spear-thrust, while Poseidon's still grips his sword and requires the quietus which is descending upon him.

⁵⁵ *J.H.S.* xxv, pp. 298f. Noticeably similar details in both are (cf. Dr. Treu in *Ol. Text* iii, p. 14) the similar fashions of breast-plates, leathern as well as of bronze,—the central giant has a breast-plate and grooves of bronze indicated by a colour different from that of the leathern ones of his followers, he also wears a helmet with plumes, these being carefully placed on to the original stone,—the similar treatment of the folds of the shirts showing below the accoutrements and a similar play of facial expression. For other points of similarity between this whole fabric and Selinuntine work, see above, note 48.

⁵⁶ Note (*Wegand*, p. 106, Figg. 109 and 110) that the Hecatonpedon pediment-group of Heraclaea and the Triton has no central figure,—only a tree for the *impedimenta* of the hero, nor has the

corresponding east pediment any central figure. Like the Megarians' treasury, which it did not greatly exceed in size, it shows only a central group.

⁵⁷ See *J.H.S.* xxv, pp. 294–301 *passim*, for evidence that VIII was an altar, and on the whole question of identification.

⁵⁸ It could not have occurred to them, as it did to the Selinuntines, when VII, VI and V had been built west of the altar, to crowd their house in between VIII and X (see *J.H.S.* xxv, p. 294, plan).

⁵⁹ If a precise date must be hazarded, Dr. Studniczka's later date (*Kyrene eine altgriechische Stadt* (1890), p. 36) rather than his *Seirepas sporitai* in *Roscher* iii, p. 1724 (*Ol. Text* iii, p. 28, n. 1) might be adopted. Though VII was the earlier foundation, the date 554–544 B.C., that of Arcesilas II, may stand for all three of them.

⁶⁰ The notion that VII must be among the very oldest fabrics on the terrace because it is built on a high level is far-fetched.

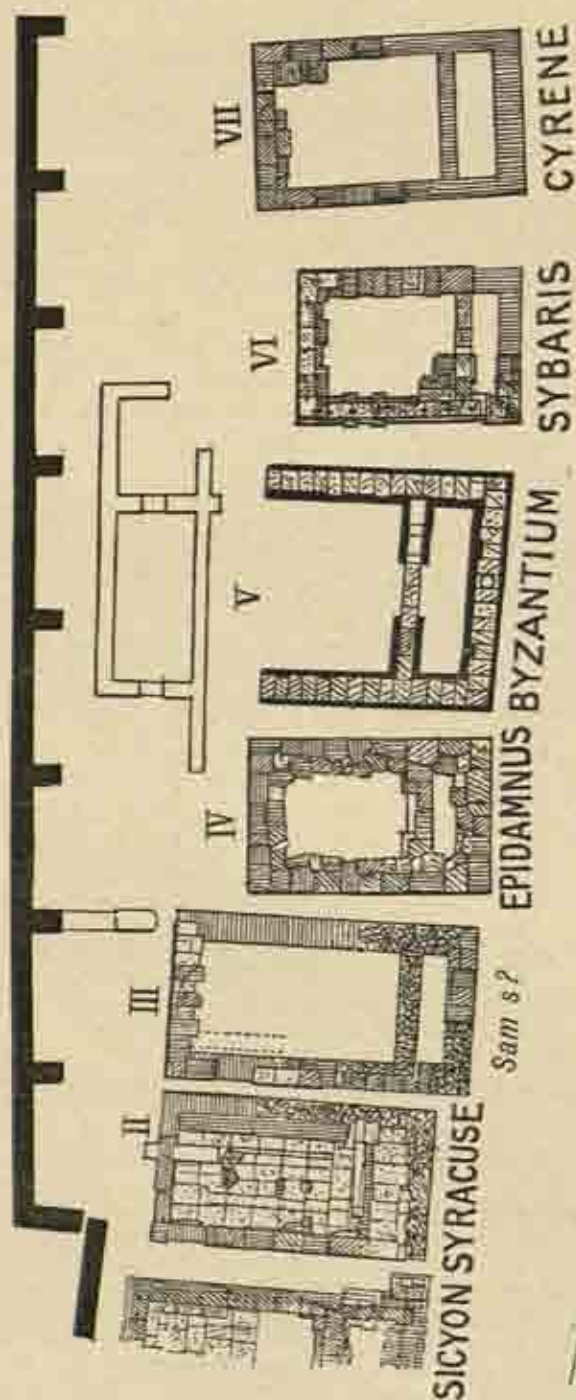


FIG. 16.

first and laid the foundations marked VII⁶¹ (see Figg. 1 and 9). Of these foundations little remains,⁶² and of their superstructure nothing for the student of architecture (Ol. Text ii, p. 48). But Dr. Treu (Ol. Text iii, pp. 19-23) convincingly argues that two sculptured fragments of North African limestone,⁶³ found at diagonally opposite extremities of the Altis, may have decorated its pediment.⁶⁴ One of them certainly represents Cyrene throttling a lion (Pindar, *P.* ix, vv. 17 and 26 ff.), an episode popular with Cyrenaeans at all epochs.⁶⁵ Dr. Treu's evidence⁶⁶ is all the more important because it suggests that the Cyrenaeans, like the Old Gelonians, fashioned at least some part of their treasury at home and carried it piecemeal across the Mediterranean to Olympia.⁶⁷

*The Sybarites' House, No. VI.*⁶⁸—Built in approximately the same decade with the houses on either side of it, VI, although currently identified with the Byzantines', should figure as the Sybarites' house. A little more is known

⁶¹ Currently identified with the Sybarites' treasury but not on the evidence of any observed facts. The identification depends entirely on Pausanias and cannot stand if VIII is an altar.

⁶² See *J.H.S.* xxv, p. 297, n. 5.

⁶³ It is of a kind common in Libya, harder and whiter (Ol. Text iii, p. 21, n. 2) than any found near Olympia. The fragments are (a) the mutilated torso of the nymph Cyrene engaged in throttling a diminutive lion (figured in Dr. Studniczka's article *Cyrene*, *Roemer*, iii, p. 172), and (b) the headless, legless and tailless trunk of a cock which nevertheless is obviously identical in type with birds depicted on Cyrenaean vases (Studniczka's *Cyrene* 36). Though found far apart, among the remains of two quite distinct Byzantine settlements, the sameness of their Libyan material and their agreement in scale prove (a) and (b) to be parts of one and the same composition, while the Libyan provenience of the limestone, the Cyrenaean scene depicted, and the style of the representation, being notably of Cyrene, conspire to identify these sculptures with the pedimental decoration of the Cyrenaeans' house.

⁶⁴ The brilliant identification by Treu and Studniczka of these pedimental sculptures ought, although these scholars by no means countenance such an idea, to dispose of the current identification with VIII of the Cyrenaeans' treasury, and should go far toward confirming its identification with VII; for VIII, restored as a treasury (*J.H.S.* xxv, p. 296, with n. 1) could not house these sculptures in its pediment, since the scene (Pindar *P.* ix, 17 and 26 ff.) absolutely requires a figure of Apollo for whom there would be no room (Ol. Text iii,

p. 22, and Roemer as above). Furthermore Dr. Studniczka notes that the date required by the style of these sculptures is about the middle of the sixth century, whereas that assigned to VIII is much earlier. Again such limestone as appears in VIII is of the wrong kind to go with the African variety. VII, on the contrary, had a pediment wider by 1.81 metre than any that could be attributed to VIII, and would therefore house both Cyrene and Apollo most comfortably. If the sculptures are dated much earlier than the approximate date (554-544 B.C.) here suggested for the founding of VII, VI and V, then the fact observed by Dr. Treu,—that Cyrene cannot have been in the archaic posture attributed to her by Dr. Studniczka (with one knee on the ground) and commonly known as the *Kasseler* (Ol. Text iii, p. 20),—is disconcerting.

⁶⁵ In the British Museum are two late Cyrenaean monuments, one a marble relief found in the temple of Aphrodite at Cyrene, the other a group found in the Cyrenaean temple of Apollo (Smith and Porcher, *Discoveries at Cyrene*, Pl. 76). Studniczka identified this Olympian fragment as representing Cyrene by comparison with both these later monuments.

⁶⁶ See note 63 f. above.

⁶⁷ Note that the Sybaritans fashioned every detail of their house (I) at home and transported the whole of its superstructure to Olympia, see below note 110 and, and *J.H.S.* xxv, p. 309.

⁶⁸ See Fig. 9 and *J.H.S.* xix, pp. 294, plan, 296, with n. 2, 297 n. 6, and 298 f., with n. 8, and also Ol. Text ii, p. 47.

of its foundations (see Fig. 9), but no more of its superstructure⁶⁹ than in the case of VII. Poros foundations like these with no footings are evidently ticklish things, for there has been a phenomenal settling at the south end, and what should be joints in its side walls are gaping rifts. The rabbetting or sinking of commissures, vertical and horizontal, has been overdone, leaving a very narrow outside rim or zone of complete contact. There are marks of the use of swallowtail-fashioned dowellings (Ol. Text ii, p. 47), and the dowels may have been either of bronze or of wood. The dimensions of VI as of VII make it practically certain that each had two columns *in antis*. Dr. Treu (Ol. Text iii, pp. 23 f.) makes out a very good case for assigning several remains of sculptured birds to the pediment of VI, which may have aimed at something like the decorative effect of VII, where the group of Cyrene was flanked by figures of the same kind, though of a very different style in the execution.⁷⁰

*The Byzantines' House, No. V*⁷¹—The next foundations on the west, V, currently identified as the Epidamnians', should figure as the Byzantines' house. Though of about the same date with VI and VII, V may because of the footings of its foundations have been the last built of the three.⁷² The need of such footings was suggested perhaps by early signs of instability in the case of VII and of VI. At all events, V must have been founded before the Scythian campaign of Darius and the capture of Byzantium by Otanes⁷³ in 513 B.C. Disappointments lie in ambush for the careful student of the foundations of V. The footings of pebbles in a matrix of hard clay have not prevented the southern substructure from falling 0.20 metre lower than that on the other sides; only one single course of poros-blocks⁷⁴ constituted the substructure thus bedded; on the north there were apparently no footings, and the course above has completely vanished. A welcome detail is the footing of the front or south cella-wall (a partition with a doorway), which has been clearly made out. This determines the exact position of the cella door, under which there is no footing but only foundation blocks for bedding the threshold-stone. A final disappointment, however, lurks in

⁶⁹ Not a stone of the entablature, the columns or the *antis*, and very few stones of the cella wall have been identified *in situ*. Even this is more than can be said for VII.

⁷⁰ Dr. Treu's identification holds good when VI is regarded not as the Byzantines' but as the Sybarites' house, for he has discovered nothing peculiarly of Byzantium about the subject represented, and the material used he identifies as Pisatan limestone. Nor does his remark,—that the comparatively advanced style of these still archaic fragments forbids our classing them with such pediments as those on the Athenian Acropolis which were entirely filled with animal figures (Ol. Text iii, p. 23 *ibid.*),—imply a date for them other than the middle of the sixth century.

⁷¹ See Fig. 9 and *J.H.S.*, pp. 294, with plan, 295 n. 2, 296, 299 f., with n. 10.

⁷² On the instability of the foundations of VI, see above, and for the same defect in VII, see *J.H.S.* xxv, p. 296, n. 5; on the whole question of footings under Olympian foundations, see above, notes 24 (p. 54), 25 (p. 55), and below, note 108 (p. 78).

⁷³ An observation of Dr. Treu (Ol. Text iii, p. 24), which he of course applies to IV, the currently accepted Byzantines' house, here identified as the Epidamnians'. It applies equally well to V.

⁷⁴ Most of the poros is of the marly variety, but there are two stones of coarser grain, containing abundant shell deposits.

the plainly scratched⁷⁵ circle marked on a central top stone of the southern foundation-wall. No column could have stood here for several reasons: (a) the scratched stone was not of the stylobate, but underlay it; (b) a column in that place would have implied eight columns for the whole front—more than it could hold⁷⁶—and would also have blocked the cella-floor. The rabbettings or sinkings of commissures are identical with those of VI, but as to the use of clamps or dowels there is no evidence whatever, since no stone of the superstructure has been recovered. Dr. Treu's reasons (Ol. Text iii, pp. 16-18) for associating with V a splinter and a substantial fragment of sculptured limestone are not given as conclusive; but it seems not unlikely that he has really pitched upon relics of the Byzantines' pediment sculptures. If any house on the terrace was decorated with pedimental sculptures, surely V was one of them, since it was uniquely elaborate,—the Young Geloans' porch being an afterthought—in having six front columns.⁷⁷

*The Selinuntines' House, No. IX.*⁷⁸—Not wishing⁷⁹ to build farther west than V (the Byzantines' house), the Selinuntines so contrived that they were allowed to build their house just east of the altar (VIII), crowding it into the uninviting space⁸⁰ west of and adjoining X.⁸¹ The date, 554-544, experimentally suggested above⁸² for VII, VI, and V, would accord with that

⁷⁵ See Fig. 9. Dr. Dörpfeld conjectures (Ol. Text ii, p. 47) that the architect may have scratched this circle in order to see whether the foundation wall was broad enough, or he may have originally intended to use the scratched foundation-stone for the drum of a column.

⁷⁶ With eight columns the intercolumniations would be reduced to 0.64 metre, although V is, with the exception of XII, the broadest of the treasury, being broader in proportion by one-third than most of them.

⁷⁷ See Ol. Text i, p. 42, and *J.H.S.* xxv, p. 299, n. 10.

⁷⁸ See Fig. 1, and *J.H.S.* xxv, pp. 294-298 with nn. 3 and 6.

⁷⁹ The Selinuntine architects plainly adopted their site as a *pis aller*, and were fully justified, after the fact, in avoiding the alternative site where later the Epidaurians built IV (see Fig. 9 and *J.H.S.* xxv, plan on p. 294), by the eventual settlement (0.11 metre along the south wall of IV) in spite of exceptionally careful footings, laid under all four walls of the Epidaurians' foundations (see above, n. 72), and note that the lamentable instability even of V, in spite of its carefully (an) footings, must have re-enforced the warning afforded to the Selinuntines by the condition of VII and VI, of which they cannot have been unaware (see also above, nn. 24 and 25).

⁸⁰ Difficulties caused by the natural level,

lower than that of VIII, forced the Selinuntines to build around and outside of their foundation-walls at the north-west corner the low wall which appears in Fig. 1. Thus, although they escaped the task of bedding their foundations, they had to support them. Also there were serious architectural drawbacks involved in crowding their house between the altar and X (see above, n. 20 and n. 58).

⁸¹ Had VIII been a treasury, the Cyrenaeans or another, the Selinuntines might have found it difficult to secure their site. To overcome the scruples of the Metapontines may indeed not have been easy, and certainly it was the cue of the Eleians, with whom doubtless the decision finally rested, to prevent the giving or taking of offence in such an uncomfortable matter. The Megarians, next neighbours of the Selinuntines on the terrace, were doubtless (see above, notes 46 end and 48 end, and also *J.H.S.* xxv, pp. 298 f.) friendly, and may possibly have used their influence to help their colonists secure the site.

⁸² A more precise date than the one established (before 510 B.C., *J.H.S.* xxv, p. 299) may possibly be derived from raising the question why the Selinuntines did not imitate the Megarians in decorating their pediment with sculptures. That their pediment was unsculptured is proved by recovered fragments of their tympanum (Ol. Text ii, p. 59 i-ii, and iii, p. 24, with Pl. i, Pl. cxiii, Fig. 4). All

of, say, 540-530 B.C. for IX.⁸² The material used by the Selinuntines for their foundations (Ol. Text ii, p. 49) was porous, but of finer grain and closer texture than the Olympian variety used for Libon's great temple. These peculiar characteristics, possibly indicating it as quarried near Sybaris (*J.H.S.* xxv, p. 298 *ad fin.*), have made easy the identification (Ol. Text ii, p. 49) of scattered remnants of the entablature.⁸⁴ On these are no marks of the use of clamps or dowellings except the — shaped one shown on the corner of the triglyph-frieze in Fig. 11.⁸⁵ If the north wall of V has entirely disappeared (see above, p. 69), the same is true of the Selinuntines' south wall (with the doubtful exception of two stones shown on Fig. 1), of half of their east wall, and of the whole of their south-west corner. Their

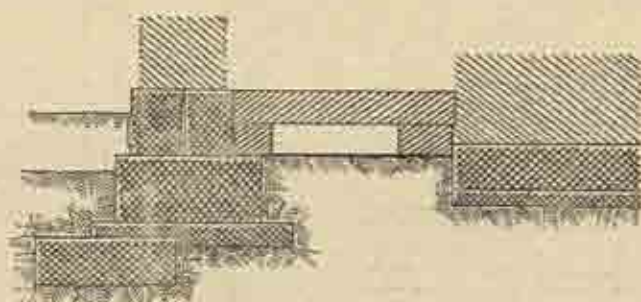


FIG. 10.—THE TWO SUCCESSIVELY LAID FLOORS OF THE SELINUNTINES' HOUSE (IX).

front cella (partition) wall has also vanished. In what must have been the centre of the cella are eight stones, evidently belonging to the support for

previously dedicated houses (except the oldest, XII, and possibly X, founded next after XII), had such sculptures. Not one founded after IX appears to have had them. For, as to IV, the fragments ingeniously assigned to its pediment by Dr. Tren (Ol. Text iii, pp. 16 ff.) hardly bear out his case and are in fact difficult to connect with any pediment, and there is no evidence one way or the other in the case of II and III. Frons, as Selinuntines, to take their cue from metropolitan Megara, our builders nevertheless took the lead on the terrace in departing from the Megarian precedent (see above, p. 66), probably because the Pisistratid gigantomachy had come into existence and made it evident that marionette figures on diminutive fabrics were absurd. The Pisistratid foundations for the enlarged Heatonpedon are dated with their sculptures in the last half of the sixth century, presumably after the restoration of the temple of Apella at Delphi, which took place soon after 545 B.C. (*Wiegand*,

p. 123). Due time being allowed for these Athenian sculptures to make their mark in Greece, it is not unreasonable to date the Selinuntines' self-denying ordinance, and with it the dedication of their communal house about 535 B.C.

⁸² See above, n. 58.

⁸⁴ These identifications are certain because one course of the cella wall,—the ὀδοειρήναι (two rows upstanding on edge and back to back), see Fig. 1,—still remains *in situ*, and is of just this material. Note the large swallow-tail-fashioned dowel-holes which make it certain that wooden dowels were used, and contrast, on Fig. 9 the smaller holes of VI, whose dowels may have been of bronze (see above, p. 69).

⁸⁵ The occurrence of — shaped clamps along with swallowtail-shaped dowellings is paralleled in the Council-house, and in the Young Gelaus' porch (Fig. 4), in both of which fabrics both of these were applied to one and the same stone.

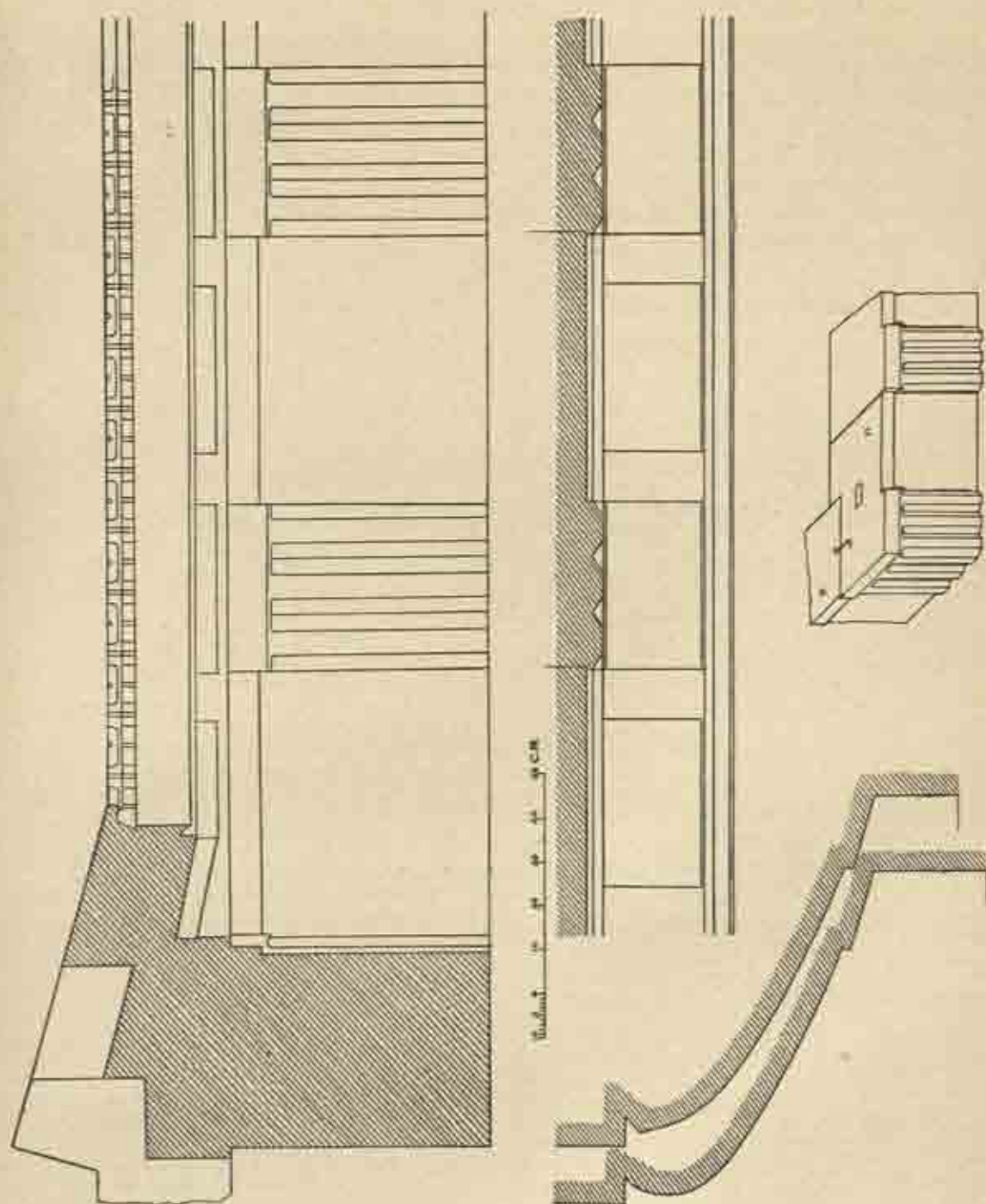


FIG. 11.—DETAILS OF THE SELIGMAN HOUSE (IX).

some statue.⁸⁸ Close examination of the cella floor and walls reveals earlier work beneath (see Fig. 10).⁸⁷ The Doric entablature shows many experimental archaisms. Its regulae have not been recovered, but were presumably untrunelled⁸⁸ like its mutules, agreeing in this regard with the regulae and mutules of the young Geloans, and of the south wing of the Council House (see above, note 21). The glyph-tops are almost rectangular, offering a striking contrast to the almost pointed arch of the Metapontines' frieze and to the Epidamnians' shapely and rounded glyph-tops.⁸⁹ It has perhaps after all been possible to identify the capitals,⁹⁰ but no remnants of the columns have been recovered.

*The Epidamnians' House, No. IV.*⁹¹—The date and name of the foundations numbered IV, currently identified with the Syracusans' 'Carthaginian' house, but more reasonably to be designated as the Epidamnians', call for no further discussion⁹² here. None of the superstructure stands *in situ*, and only two courses of the foundations remain, along with their very thoroughly laid footings.⁹³ (See the east wall foundations to the left of V on

⁸⁸ See Fig. 1. Here is the solitary indication from the Olympian terraces that there may have been in a treasury something of the nature of a cultus statue.

⁸⁹ The earlier floor consisted of limestone concrete, *i.e.* (a) 5-10 millimetres of mortar, (b) 5 millimetres of very hard mortar or concrete, (c) a very thin layer of lime, spread directly on the soil and still in a state of excellent preservation. About 0.44 metre above this floor is laid a later floor, consisting of porous flagstones, separated from the concrete by a void. The floor of stucco applied to the side wall by the contrivers of the concrete floor and extending plainly down to its level, shows that they did not also lay the flagstones.

⁹⁰ It is, however, possible that the Selinuntians, like the builders of the south wing of the Council-house, may have trunelled their regulae and left their mutules untrunelled.

⁹¹ Dr. Wiegand's fabric 'B' has square glyph-tops also (pp. 158-182, and Pl. xiii, no. 3); see on p. 163 the case of the Heratempelion whose glyph-tops are scrupulously rounded, while (incised and painted in red and blue alternately) on a line with them as their continuation across the adjacent metopes, are flat or square-topped glyphs like those of the Selinuntians. It is still more noteworthy that the flat and the rounded glyph-top figure together, though not in the same frieze, upon Iliou's great Olympian temple. The glyphs of the pteron are flat, but those above the cella door are round (cf. below n. 99).

⁹² Two Doric capitals have been found, both of a stone which matches that of IX, but show-

ing profiles so divergent that Dr. Dörpfeld declares (Ol. Text II, pp. 49 f.) it impossible to decide which one is Selinuntian, and insists that both cannot have belonged to the same fabric, although both,—so far as measurements go,—might be adopted. Then we should but have a repetition, in treasury IX, of that strange variation in the profile of capitals belonging to the same building which is thoroughly exemplified by the ancient Olympian Heraeum near by. This view has seemed to me the more reasonable one, and both these columns are therefore shown in Fig. 11. Here again is an illustration of the experimental phase of archaic Doric as exemplified by the Olympian communal houses.

⁹³ See Fig. 9 and also *J.H.S.* xxv, pp. 294 ff. with nn. 2 and 11.

⁹⁴ *Id.* pp. 294 ff. with plan and n. 2, and 295 ff. with nn. 8 and 11. It is, however, just worth mentioning that Dr. Wiegand's fabric 'A' (which offers, as will appear below, startling and detailed agreements with the superstructure assigned to IV) agrees also with it in date (see below, note 99). The assignment of the superstructure is proved. It follows therefore that the current attribution of IV to the Syracusans must be abandoned, unless we give up Pausanias' well-attested date for the Syracusans' foundation (*J.H.S.* xxy, p. 239 *ad fin.*).

⁹⁵ Here again, as in the case of V, the footings have not prevented a settling of the foundations (0.11 metre on the south side). What would have happened, if the Epidamnians, taking warning from the condition of VII,

Fig. 9 and the plan in *J.H.S.* xxv, p. 294.) Scattered splinters of brilliantly white limestone have led to the identification,²⁴ as parts of the superstruc-

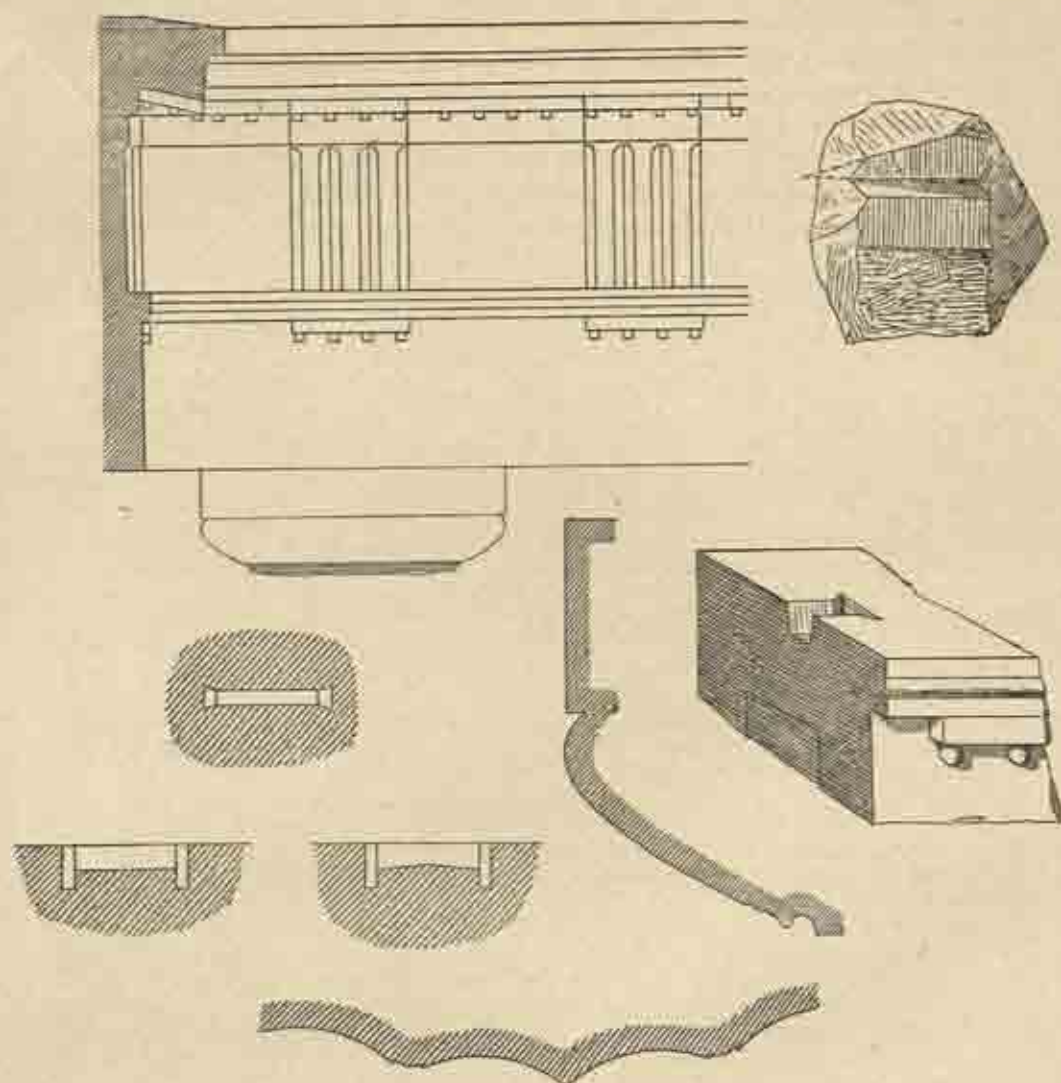


FIG. 12.—DETAILS OF THE EPIDAUURIANS' HOUSE (IV).

VI, and V, had not taken pains with their footings, may be guessed from the fact that, to reach the solidly compacted soil further west, the Sicyonians had to dig as deep as 3 metres. As compared with the eastern end of the terrace this western end was evidently the recent result of land-slips from Mt. Cronos (see above, notes 24, 28, 72, and 79). Although few traces of the Epidaurians' footings were found under the north wall, yet they evidently had

footings there and to this extent protected by the experience of the Byzantines. Both remaining courses of their foundations together reach a height of 0.70 metre; the stone used is ordinary Olympian poros with sporadic bits of sandstone or marly limestone. But these stones are not dressed as for ashlar-work, but with a view to a sort of polygonal masonry not paralleled elsewhere on the site.

²⁴ See Fig. 12 and *J.H.S.* xxv, p. 300, n. 11.

ture, of five groups of fragments shewing the same *facies*.⁹⁵ (These constitute the evidence justifying the several restorations of the architectural details of IV shewn in Fig. 12.)

These last again shew interesting archaic variations from the more settled forms of full-fledged Doric: in place of the ordinary 20 flutings vertically bounded or contained by 20 arrises, the shaft shews, apparently, as many as 32 flutings bounded by 16 of the usual arrises alternating with 16 vertically cut astragal mouldings recessed between and contained by right angles: the horizontal member ending the architrave upwards is not a ribbon-band or taenia pure and simple performing the functions of an undecorated abacus: instead of this it carries horizontally the recessed astragal already introduced vertically between the alternate flutings of the columns:⁹⁶ as for the regulae, they carry *four* trunnels,⁹⁷ and the same number is repeated on the mutules;⁹⁸ a more successful experiment than that of the profiled taenia of the architrave is made in the beautifully rounded glyph-tops of the frieze:⁹⁹ the regular number of three

These fragments found in the neighbourhood of the Prytæum, and appropriated to the foundations of IV, belong to it independently of the same it may bear (for the same case of VI, see nn. 63 and 72). Measurements based upon these fragments regarded as relics of a Doric superstructure tally in all particulars with the requirements of the foundations numbered IV, providing for an extra triglyph between the two columns *in antis*,—a by no means inadmissible arrangement.

⁹⁵ These five are: (a) sufficient bits of the stones of the walls to determine their size and — shaped dowellings (restored in Fig. 12), to make out in the right places gripping-holes drilled for lifting-irons, and to show that their rabbetings, horizontal and vertical, were deep and sharply cut so as to leave a broad surface of complete contact: (b) splinters of a Doric column; (c) a fragment of the architrave; (d) a good number of fragments from the frieze, by careful measurement of which the respective dimensions of triglyphs, metopes, regulae, and various members appertaining have been arrived at: (e) remnants of the cornice and of a tympanum-block,—the former sufficient to confirm the fact, otherwise arrived at in the case of the regulae, that there were only four trunnels abreast on the mutules, the remains of the latter being ample for determining the upward slant of the pediment (see Fig. 12).

⁹⁶ I discover only one parallel to this tripartite profiling of the taenia,—its analogue occurs on the 'middle' temple at Selinus. The Metapontines' treatment as a cornice of the abacus along the top of their frieze is,

however, a somewhat analogous experiment (see above, pp. 56, *ad fin.*, and 57 with note 31).

⁹⁷ The trunnels hang 9 millimetres apart, but otherwise elude measurement; the very precisely determined measurement of each regula, however, is 0.896 millimetre and allows only four trunnels.

⁹⁸ Archaic Doric had evidently not a fixed rate as to the number of trunnels to be shown abreast either in the architrave or on the cornice, for the Athenian Hecatompedon (*Wiegand*, Plate 8) shewed four trunnels on mutules above metopes and six on those above triglyphs and on regulae. Dr. Wiegand's fabric 'A' on the other hand (Plates xi and xii) shews four trunnels above metopes, but five above triglyphs and on regulae.

⁹⁹ Just such are the glyph-tops of Dr. Wiegand's fabric 'A' (Plates xii and xiii 2), and the measurements of its frieze are strikingly identical with those of the Epidaurians, while the date assigned to it is the one roughly assigned by Dr. Dörpfeld to the Epidaurians' superstructure (see *Wiegand*, p. 155 and Ol. Text II, p. 46 *ad fin.*). While the pointed glyph-top of the Metapontines appears to be an architectural *ἄρσος ἀεὶ ἀνέστη*, so to speak, it is hard to decide whether the squared type of the Selinuntines and Sicyonians or the rounded type of the Epidaurians was the prevalent one in archaic Doric. The latter is found on the temple at Assos, and the Selinuntine temple 'C,' but the former on a still older Selinuntine temple, while both were used by Libon on the Olympian temple of Zeus. The squared type

rows (four in each and not six) appears in the trunnelling of the mutules.¹⁰⁶

*The Samians' House, No. III.*¹⁰⁷ and the *Syracusans' House, No. II.*¹⁰⁸—As no recovered and recorded details exist, either of the Samians' (I) house III, or of the Syracusans' 'Carthaginian' house, II, nothing can here be added to the discussion of them previously given, and only the Sicyonians' treasury remains to be considered.

*The Sicymians' House, No. I.*¹⁰⁹—The first or westernmost of the twelve treasury foundations on the Olympian terrace was also the first to be unearthed, and was for a time supposed to represent the second treasury mentioned by Pausanias, the first seen by him having been provisionally identified with foundations further west, of a most scanty and dubious character.¹¹⁰ Less dilapidated than those of the other treasuries,¹¹¹ the Sicyonians' foundations lack only a portion of their south wall (see Fig. 13).

Finally prevailed, no doubt because it harmonises best with the characteristic Doric model for the tops of column-flutes. The rounded type is suggestive of Ionic flutings (cf. n. 89 above).

¹⁰⁶ Precise measurement proves that each glyph on the Epidaurians' frieze was 0.162 metre broad, 0.308 being the width of the whole triglyph. Thus is confirmed the length (otherwise obtained) of the regulae, and also the mutules are proved to have carried only four trunnels. The number of rows (sometimes there were two, sometimes three), as well as the number in a row, seems to have varied in archaic Doric, although there is no recorded case of two rows at Olympia.

¹⁰⁷ There are several circumstances in the connexion of Samos with Olympia at the beginning of the fifth century, A.D. which make it not unreasonable to suggest that the Hellenistic inscription (found on May 23, 1878, north-east of the Heronum in a Byzantine wall) ΣΑΜΙΩΝ (Ingold and Dittenberger, *Ol. Text* v, no. 632), 'from some building not seen by Pausanias was really on a building which Pausanias did see, namely on the otherwise anonymous treasury of *J.H.S.* xxv, pp. 294 f. with notes 1 and 2, and p. 300,—c.c. III. This attribution would bear out the prior foundation of IV (*J.H.S.* p. 200), and the Hellenistic date of the inscription is matched by that of the strikingly similar one on XI, (*Ol. Text* v, no. 633), cf. above, p. 35.

¹⁰⁸ See Fig. 9, and *J.H.S.* pp. 294 f., with plan and an. 1 C and 4, 299 f., and 305.

¹⁰⁹ See Fig. 13, and *J.H.S.* pp. 294 f. with plan, 299 f., 306 f., and 308.

¹¹⁰ The word ΣΧΕΛΩΝΙΩΝ, inscribed on a stone unearthed close at hand (belonging upon

the south face of the eastern ante, where it confronted everyone entering with a glance to the right) practically settled the question,—see Dr. Adler in volumes IV, pp. 35 ff. and V, pp. 30 f. of the *Ausgrabungen zu Olympia*. The disconcerting ruins on the west,—foundation-stones of a south-western corner under remains of the 'Esedra' of Herodes,—are now conjectured to be relics of a temple of Aphrodite Urania (see Dr. Robert, *Mittheilungen*, xviii, p. 43, and Dr. Dörpfeld, *Ol. Text*, i, p. 75).

¹¹¹ Because, apparently, it alone of all the treasuries was buried under the great landslide of the sixth century, A.D.—a well authenticated catastrophe especially interesting because it suggests similar landslides in remoter times to explain why the soil along the whole western end of the terrace was so unstable that even the most carefully bedded foundations there laid (those of I, IV, and V) exhibit marks of instability (see above, notes 93 and 72) while those laid without footings (VI and VII) suffered most seriously from settling,—see *Ol. Text* II, pp. 48 f. and above, notes 58 and 30), and compare notes 24, 25, and 79. Until this landslide, I, like all the other foundations on the terrace and their rising superstructures, lay for long generations at the disposal alike of the builders of the Basilica (at 420 A.D. when Libani's great temple was burned) and of Leo's fort (ca. 465-470 A.D.). It was apparently monopolised by the former and by the still less skilled, but contemporaneous, builders of the earlier Byzantine village around the Prytaneum. Doubtless it did not tempt Leo's engineers because the open way along the front of the Echo portico made easy the transportation of materials from XII and XI.

Steps two in number, one of them apparently refashioned into two, are plainly visible on all sides. Much of the inside pavement lies *in situ*, and also not a few blocks of the bottom course of the cella walls, many others

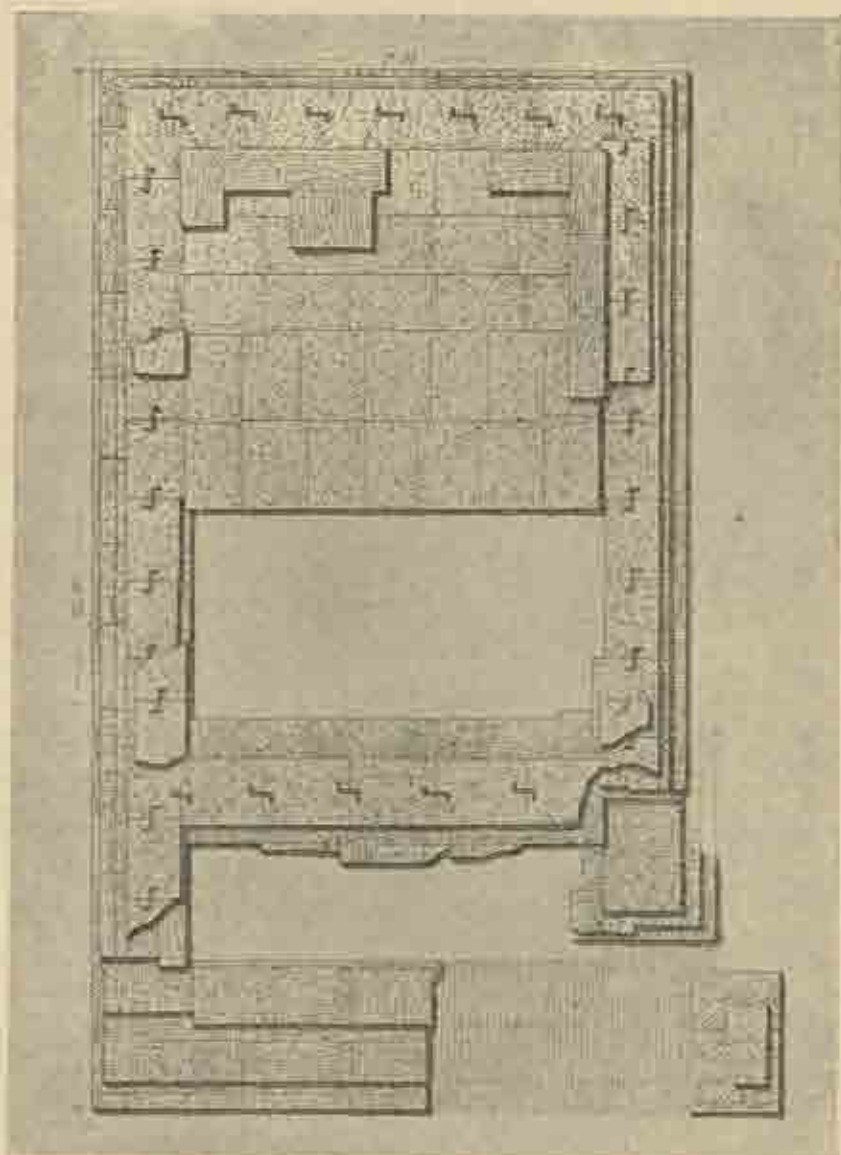


FIG. 13.—FOUNDATIONS OF THE SICYONIANS' HOUSE.

of which were found scattered about near at hand, along with many stones from the architrave, cornice, and frieze.¹⁰⁶ These are the large and unmanageable

¹⁰⁶ A proof of the ruinous condition of the whole fabric before the great landslide, but after

the builders of the Basilica and the Prytaneum village had wrecked it.

stones from the wreck; more portable ones came to light in the Basilica and the Prytaneum village. All extant portions of the building have, with time and patience, most assuredly been recovered, their imported Sicyonian stone being unique on the site (*J.H.S.* xxv, p. 309). Examples of practically all its architectural members having thus been identified, the last built among the dedicated communal houses at Olympia (*J.H.S.* xxv, pp. 299) takes its place on the record of modern archaeological research as one of the most adequately recovered and interpreted minor monuments of Hellenic architecture.

The merest glance at the ground plan given in Fig. 13 shows such a difference in solidity as regards their foundations between the front (south) and the partition (front cella) walls, that the former alone can have been intended to support columns. This justifies the restoration of the whole fabric as a *templum in antis*.¹⁰⁷ Measuring inside 10.49 by 5.26 metres, and 12.89 by 7.31 outside, I, small though it was, ranks among the larger houses on the terrace. For their modest building, the Sicyonians dispensed of course with anything like the solid masonry that formed the Parthenon stereobate, or the moulded erection under Labon's great temple, and were content with piecemeal foundations and footings.¹⁰⁸ Just at the back (north) end, however, where the virgin soil¹⁰⁹ came nearest to the surface, something like a solid and continuous stereobate is laid. This extends under the whole northern half of the cella, where the two foundation-courses underlie not only the walls but also the whole floor of the north half of the cella. Upon the flagging above this very solid basement (discontinued under the southern half of the cella and the vestibule) were doubtless placed the ponderous *θόλαυροι* dedicated, says Pausanias, by Myron and the Sicyonians (*J.H.S.* xxv, pp. 308 f.). Reverting again to the opposite (south) foundation-wall, and fixing attention on its right hand (south-eastern) corner, note particularly a detached extension of it so laid that it cannot but have been intended to support an altar (*J.H.S.* xxv, p. 306 f., and n. 35 above).

As for the superstructure of I, whose more essential features are exhibited

¹⁰⁷ This restoration is amply confirmed by recovered stones belonging to both antae.

¹⁰⁸ Unlike the Epidaurians, the Sicyonians left their north wall and end without footings probably because IV had settled permanently before I was planned, and the fair inference was that its builders could with safety revert to the practice of the Byzantines, since V, with no footings and, as its north wall, had fired no worse than IV. The Sicyonians did, however, dig very deep trenches for their footings, especially under their south wall where the subsoil was most ticklish (see above, note 106). Their trenches were filled with rubble, pebbles, splinters from porous blocks, chips of bronze, and also a few shreds of terracotta roof-tiling of strikingly archaic mould and derived evidently from some fabric (possibly an earlier

Sicyonian treasury, — see *J.H.S.* xxv, p. 309) far more ancient than I (see Ol. Text II, p. 41). These footings underlay the whole south wall and extended for a short distance northward under the two side walls. Above them and also under all parts where footings were dispensed with, came the foundation-courses strictly so called: (a) small stones laid in a mortar of clay, (b) ordinary blocks, chiefly of common local poros, but occasionally of the same imported heavy sandstone of Sicyon used for the whole superstructure.

¹⁰⁹ Under the south wall the virgin soil ran in places as much as 2.40 metres below the surface, the soil to that depth having presumably slipped down from Mt. Cronios (see above, n. 25).

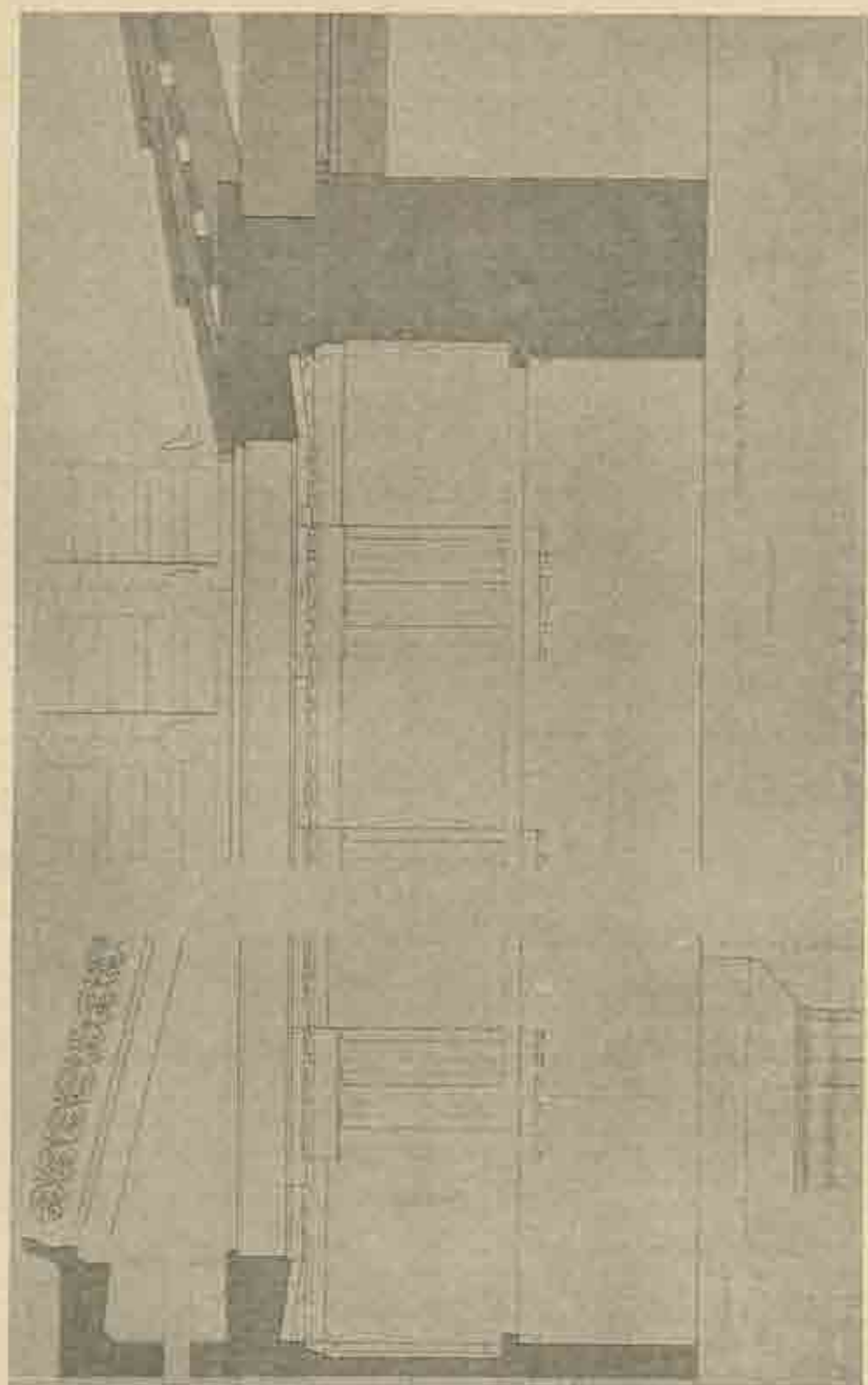


FIG. 14.—RESTORED DETAILS OF THE SICYONIAN HOUSE.

(as restored) in Fig. 14, not only are all its very numerous recovered blocks and fragments of the same tawny limestone (verging toward sandstone) presumably quarried near Sicyon, but sixteen important blocks among them bear as stonemasons' marks peculiar letters belonging specifically to the alphabet of common use at Sicyon between 500 and 450 B.C.¹¹⁰ If the building were at Athens, the further fact that — shaped clamps (see Fig. 13) are used throughout the whole superstructure would weigh among the many other convincing arguments in favour of dating it as near to 500 B.C. as would on other grounds be possible.¹¹¹ It is, however, satisfactorily evident that Dr. Dörpfeld can away with these clamps in his defence of the date ca. 450 B.C. (see *J.H.S.*, xxv, p. 299, and *Ol. Text* ii, p. 43). In the Peloponnese such clamps may be on any building of the first half of the fifth century, just as the alphabet of all the inscriptions might appear on any Sicyonian building of that half century. There remains, however, a certain presumption favouring a date early in that period for the use of — clamps, and no one has stated this presumption in the case of Peloponnesian buildings better than Dr. Dörpfeld himself (*Ol. Text* i, p. 80). Thus the burden of

¹¹⁰ Φ (for β), Σ (for EI), χ (for E or H), and the straight iota occur among others, and reproduce the alphabet of a vase from Caere dated by the artist's name Eceklas (see Roberts' and E. Gardner's *Introduction to Greek Epigraphy*, pp. 137 and 138). The same date 500-450 B.C. is assigned in these stonemasons' marks, when we consider the identity of their alphabet with that of the inscription (see above, note 104, and cf. *Ol. Text* v, Inscription no. 649) on the anta of I and its variation from that of the earlier dedicatory inscription on a Sicyonian bronze lance head (showing Λ for χ) found at the north-eastern corner of Lao's wall in 1878 (*Ol. Text* v, no. 245). These sixteen stones were all inscribed on their bottom horizontal surfaces in the outer lands (smoothly dressed for complete contact). The sixteen thus especially noted were doubtless those about the proper placing and fitting of which perplexities might readily arise, considering that all the stones alike were (a) quarried, dressed and marked at Sicyon, (b) thence transported by sea to the mouth of the Alpheius, (c) and thence carried by road or in barges to the Olympian terrace (*J.H.S.*, xxv, pp. 303 and end 309, and no. 818 in Purgold and Dittenberger's *Ol. Text* v).

¹¹¹ Considering the absolute definiteness with which Athenian buildings are dated earlier and later according as they have — shaped or — shaped clamps, it is disconcerting for the unexpert to find that both kinds were used on the temple of Apollo at Bassae, and to note that — shaped clamps were used on the

Megarian treasury (see above, note 43), the former built long after, and the latter as certainly much before 500 B.C., the date when we are to suppose that the — shape was definitively abandoned at Athens. No inferences can therefore be confidently drawn in the Peloponnese as to the date of a building from the use of — or — shaped clamps. But see Dr. Dörpfeld's argument (*Ol. Text* ii, p. 43) in view of which his argument (*Ol. Text* i, p. 80) concerning these Peloponnesian fabrics is perplexing, for in this last he makes no distinction between Athenian and Peloponnesian work, saying 'Wenn wir beim Zerstempel und bei der Basis des grossen Kultbildes Eisenklammern von der Form —, beim Gebäude A dagegen solche von der Form — finden, so sind wir, so lange nicht das Gegentheil positiv erwiesen ist, verpflichtet an verschiedene Bauzeiten zu denken.' His conclusion is that fabric A (with — shaped clamps) is of earlier date than Libon's great temple (with — shaped clamps). Has Dr. Dörpfeld so clearly demonstrated the architectural modernity of I that he is not bound by his own rule to date it before Libon's temple? The consistent archaisms of its details are eloquent in a contrary sense. It seems one of the most pressing desiderata for the study of Greek architecture that some competent expert should gather all the evidence now available as to the use of clamps and dowellings, without quite taking it for granted that every Athenian building showing — shaped marks is therefore to be dated earlier than 500 B.C.

proof so far lies with those maintaining 450 as against 480-477. The rest of the evidence also favours return to the date 480-477 B.C. assigned to I on its first discovery by Drs. Adler and Purgold. The former was guided by architectural considerations mainly, the latter by epigraphical ones, so that they drew light from a wide range of evidence and are the less likely to have erred, even though, when they fixed the date, they believed that I was the Syracusans' 'Carthaginian' house, built in commemoration of the victory at Himera (*Abgrabungen zu Olympia*, IV, p. 36). The capitals, of which one is recovered, had four annulets; the echinus, though decidedly archaic, is more like that of Libon's temple than any of the splaying profiles of the Heraeum: but it shows no approach toward the profile of the Parthenon.¹¹² Of the two column-shafts of I, two drums¹¹³ have been recovered, and these combined yield evidence of an entasis so slight that it escapes detection when each is viewed separately. The Megarians' house (XI, see above, note 40) is a parallel example, showing that entasis could be wholly dispensed with in archaic Doric at Olympia. The height of the columns was approximately 3.84 metres,¹¹⁴ and an iron gate fenced off the vestibule.¹¹⁵ Scrutiny of the many recovered blocks from the upper courses of the side walls shows that the two uppermost of these courses corresponded to the architrave on the south and north faces of I.¹¹⁶ Thirty-six metopes and the same number of triglyphs formed the frieze, which adorned all four faces of I,¹¹⁷ and the archaic habit

¹¹² Libon's Olympian temple was planned about twenty years after 480-477 B.C., the date adopted above for I; the Parthenon came later. Dr. Dörpfeld's date for I is after the Parthenon, and is defended because of an astragal moulding along the top of the frieze alike of I and of the Parthenon. But the Parthenon may quite as well have got this feature from I (*J.H.S.* xxv, p. 299). Now the profile of the Syracusians' capital (Fig. 11) is nearly identical with that of the Megarians' (Fig. 6), and both are equally and strikingly similar to those of Libon's temple but absolutely agree in differing from them as to the profiling of the four annulets—those the Megarians and Syracusians terminate with sharply defined angles, whereas Libon ends his with a flat terminal surface (see *Ol. Text* Pl. I, Pl. xv, and cf. *ib.* Pls. xxv (Sicyon) and xxxvii (Megara)). But just this difference, — the pointed annulets of XI and I are found on the Young Gelous' capitals (Fig. 3), dated before 500 B.C. as XI is dated before 550 B.C., and also on the capitals of the southern or later wing of the Olympian Council-House (*Ol. Pl. A*, Plate Ixii). These last are otherwise very similar to Libon's profiles, although Dr. Dörpfeld for obviously good reasons dates the south wing considerably earlier (*Ol. Text* I, p. 79). But if we adopt this date for that fabric, how can we, in the face of the Gelous and Megarian affinities of I, fail to do the like for I? Indeed the most trustworthy

ness of dates based on any one architectural detail is just here brought home by the further fact that the profiling of the annulets on Libon's temple is matched by what may be the oldest of all Olympian Doric capitals (see Fig. 3 and *Ol. Text* I, pp. 44 and 77, and above, n. 17).

¹¹³ Each shaft consisted of two drums. At the top or necks ran three horizontal neckings or incisions, and here again the profiles of the Megarians and the Syracusians are alike, and agree in differing from Libon's as well as in resembling those of the Young Gelous' and of the archaic capital of Fig. 3 above, n. 17, both of which, however, had four incisions.

¹¹⁴ The column-height has been calculated as corresponding to the lower twelve courses of the walls, since the recovered lower drum is so fractured at the base that direct measurements were impracticable.

¹¹⁵ This is proved by three semicircular settings drilled into the lower drum at suitable heights and intervals.

¹¹⁶ See above, p. 60, *Ol. Text* ii, p. 42, and *Wiegand*, p. 61, where the same peculiarity is noted in the Heortompedon at Athens and the Olympion at Agrigento. Here again is an archaic note borne also by Dr. Wiegand's fabric 'A' (p. 149) dated ca. 550 B.C.

¹¹⁷ Of the thirty-six sandstone blocks, twenty-nine have been recovered.

of fashioning triglyph and metope together from one and the same block is adhered to.¹¹⁸ Taenia and regulae, as a necessary downward finish for the frieze, appear also on all four faces, crowning the top course of ashlar along the two sides. In treasury I, the old fashion of mutules shorter above metopes than above triglyphs has been abandoned; but two archaic notes still attach to its frieze, absent both of them from Libon's temple: (*a*) the proportions and profiles of its glyphs are comparatively inelegant, their tops being flatter and closely resembling those of the Athenians' Delphian treasury, built presumably in commemoration of Marathon; (*b*) its pedimental metopes are broader by 0.40 metre than the metopes of its eaves, which are square;¹¹⁹ and consequently, as the mutules were all of the same length, the voids (*viae*) intervening must have varied in breadth.¹²⁰ Another consequence of having metopes of different breadths was that, in order to make the broader (pedimental) ones appear to the eye as square, these were heightened at the expense of curtailing the supervening abaci,¹²¹ which thus became narrower than the abaci above the adjacent triglyphs. But this would have resulted in a most disagreeable effect of discontinuity in the frieze as a whole, if the Sicyonian architect had not invented to counteract it the brilliant idea of an astragal moulding which he introduced continuously along the tops of all his abaci,—for all details see Fig. 14. If this reasoning finds acceptance, the hypothesis that the Sicyonians must have waited until the Parthenon was built before conceiving the desirability of their famous astragal is untenable.

Marks, or rather notches, for the use of lifting-irons, some of them afterwards plugged, have been noted on many of the stones of the superstructure, but a number of the cornice-blocks shew in their horizontal commissures two holes not far apart, being the points of emergence or mouths of a semi-circular tunnel dexterously drilled to receive the noose of a cable with which, instead of with lifting-irons, they were swung into place.¹²² Horizontal

¹¹⁸ Another archaic note (see above, n. 56).

¹¹⁹ The Heatonpedon and many other archaic poros buildings had one breadth for pedimental triglyphs and a lesser breadth for triglyphs on the sides. The Sicyonians innovated, but were still true exponents of 'præmonition' or experimental Doric in trying one breadth for pedimental metopes and a lesser breadth for metopes along the sides. Here then is another archaic note which at the same time shows that the experimental period is drawing to its close, since the Sicyonians' ingenuity resulted in a great advance toward harmony and regularity.

¹²⁰ Here again is an archaic note which is at the same time an improvement on various old Attic poros buildings where short mutules stood above metopes and long ones above triglyphs, apparently in order to avoid any variation in the breadth of the intervening voids. This last variation the Sicyonians evi-

dently tolerated as a lesser evil, and thereby showed admirable artistic discretion. For the disquieting and ungainly effect of their rejected alternative, see Wiegand, Plates i and xii.

¹²¹ Note in Fig. 14 that along the sides the abaci are all of exactly the same dimensions, whereas, under the pediment, abaci over triglyphs are twice the height of abaci over metopes (see note 31 above). The idea of such a variation may have derived from the Pisistratid extension of the Heatonpedon, where, as in Libon's temple, all abaci over metopes are of less height than the abaci over triglyphs. On the original Heatonpedon, and on Dr. Wiegand's fabric 'A,' as on the sides of I, there is no variation in the dimensions of abaci.

¹²² Here is another archaic note, since this substitute for lifting-irons is abundantly proved for the beginning of the fifth and end of the sixth century B.C. by the recovery of similar tunnellers' (a) on blocks built into the north

commissures were so rabbeted as to leave two-thirds of their surfaces for complete contact; on the vertical commissures these surfaces were relatively smaller. Wooden dowels 65 millimetres square and 50 high were used in the drums of the column-shafts. Abundant evidence shews that the pedimental cornice and the tympanum space cannot have had any sculptural or other decoration.¹²³ There is little doubt that the Sicyonians' roof was of marble, since many fragments of marble tegulae and imbrices were unearthed close to the foundations, and with these were relics of a marble cornice belonging to the pediments. Dripping eaves (see above, n. 49 end) ran along the sides, each downward flanking ridge of imbrices being presumably terminated by an antefix although no antefix-fragments have been recovered. Traces of colour were not lacking. Cobalt blue shewed on several triglyphs and on the trunnels of one cornice-block *mutule*. Vestiges of red and blue shewed on the Lesbian cyma of the ascending as on the Dorian cyma of the horizontal pediment cornice.¹²⁴ The pediment also shewed ornamentation which had plainly never been touched with paint.¹²⁵ On the capital, which is well-preserved, there are no traces or intimations of colour or decorative design, the same being true of the Megarians' and the Young Geloans' capitals and of those of the Hecatompedon at Athens. To the modern eye at least, this is a great point of superiority in archaic Doric as compared with that of the Parthenon, if we must accept Dr. Bötticher's ideas about the painting of its capitals. Traces not of actual red and blue, but of their former presence,¹²⁶ shewed quite unmistakably along the top of the inside walls, so that nothing is more certain than the former decoration both of the vestibule and of the cella walls throughout with a fretted frieze ending, where it touched the ceiling,¹²⁷ with a Doric cyma. The effect of this design is strikingly similar to that of the painted *anta-capital* of Dr. Wiegand's fabric 'A.'

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wall of the Athenian Acropolis from the Hecatompedon, (B) on one of the triglyph-blocks found in the substructure of the Mnesiclean Pinacotheca, but identified as having originally belonged to a small apsidal Doric building with three columns in *antis* of about even date with the Athenians' Delphian treasury (*Wiegand*, p. 158, *ibid.*).

¹²³ See above, n. 82.

¹²⁴ Dr. Wiegand's fabric 'A' has, in most respects, just the scheme of colouring shewn here and in the Megarians' treasury (see above, note 52). It shews just this red and blue Doric cyma, once on its pedimental cornice and again on the capitals of its *antis*, as well as under the pediment along the top of the tympanum (see *Wiegand*, Pl. xii). Note also that, if brown for triglyphs and *mutules* be substituted, the beautifully modulated colour-scheme of the Athenian Hecatompedon is almost the same as

that used by the Sicyonians. In the points of difference, however, the Athenians shewed their artistic pre-eminence over Peloponnesians of a later period of more advanced art (see Dr. Wiegand's really wonderful Plate i).

¹²⁵ See Ol. Text ii, p. 42 *ad fin.* No details or further particulars are given. Perhaps the decoration may have been like that shewn on Dr. Wiegand's Plate vi, although in that case it would hardly be certain there may not have been some colour sparingly used.

¹²⁶ By reason of greater protection from weathering afforded to the delicately stuccoed original surface (see above, n. 9) by the preparation of red here used as contrasted with the blue, Ol. Text ii, p. 184.

¹²⁷ Above the Doric cyma, along the sides of the cella and the vestibule, shewed seatings for the beams of the ceiling.

ON THE 'LIST OF THALASSOCRACIES' IN EUSEBIUS.

It is some years now since I had occasion to enter on the question of the value of the List of Thalassocracies, attributed to Diodorus and to Castor, in connexion with an enquiry, not yet completed, into the history of Cyprus in early Hellenic times; and it seemed to me then, *first*, that it would be of considerable importance, elsewhere than in Cyprus, if this list should turn out to have historical value; and *second*, that the evidence for its credibility was considerably stronger than was currently supposed. But it was not until the appearance of Dr. Hugo Winckler's paper on the Euphrates-lands and the Mediterranean in the popular German series entitled *Der Alte Orient*,¹ that it seemed worth while to say anything about this formally; and I only do so now because with all the respect due to so distinguished an Orientalist, it does not seem to me that Dr. Winckler's interpretation satisfies all the conditions of the problem.

What I hope to be able to do in the present paper is, first, to establish a case for the general credibility of the list, from its lower end up to the lacuna which mars its middle sections; next to attempt to find a fixed chronological point in the part of the list which comes above and before the lacuna; and then, with this basis, to try both to fill the lacuna approximately and to explain its origin.

§ 1.—*The Origin of the List of Thalassocracies.*

The List of Thalassocracies comes down to us in a passage in the *Chronicon* of Eusebius.² Eusebius ascribes it expressly to Diodorus; and as it is known that Diodorus dealt with the period which it covers in his lost Seventh Book, the excerpt is to be found printed among the fragments of that book in the Didot edition. It is also printed, for the reason which will appear directly, among the fragments of Castor of Rhodes, at the end of the Didot Herodotus.³

The existence of such a list of Thalassocracies is plainly presumed at

¹ Leipzig (Hinrichs), vol. 7, part 2, 1895.
² Pp. 168-9 in Mai's edition; p. 225 in Schoene's.
³ *Iam tale ex Diodori scriptis, breviter, de*

temporibus Thalassocratorum qui mare tenebant, Post bellum Troianum mare obtinuerunt etc. etc. . . . usque ad Alexandri (sc. Xerxis) trans missionem.

the end of Diodorus v. 84.⁴ But the following books are lost, and we are dependent on other sources than the text of Diodorus for the details of the period which follows.

That Diodorus took this list from his contemporary, Castor of Rhodes, as supposed by Bornemann,⁵ is possible; though Wachsmuth, for example, doubts it.⁶ But this does not follow the document appreciably further back; and Eusebius at all events says he got it from Diodorus.

Castor however is quoted by Suidas as having written on the Thalassocracies: *ἔγραψε δὲ ἀναγραφὴν Βαβυλῶνος καὶ τῶν θαλασσοκρατησάντων ἐν βιβλίοις β'*—apparently a double-barrelled treatise, of which one half dealt with the *land*-history of the East, and the other with the *water*-history of the Eastern Mediterranean. There are plenty of fragments of the Babylonian part; but of the other no direct quotation survives. We are consequently not in a position to say whether Castor's list was of his own composing, or whether, as in the case of the Babylonian chronicle, he abridged and compiled from identifiable sources.

The word *θαλασσοκρατῆσαι* however is of older currency, being used of Carthage by Polybius,⁷ and of pre-Achaean Paros by Apollodorus.⁸ The reckoning of Thalassocracies was also carried up earlier than the Trojan War, as is shown by the case of Paros just quoted; by that of pre-Achaean Carpathos in Diodorus v. 54; and by the still earlier case of Minoi. A similar phrase is used also by Strabo about Chios;⁹ and again about Polycrates,¹⁰ probably in reference to the same thalassocracy of Samos as appears in the systematic List. Local thalassocracy, like that of Sinope in Pontus,¹¹ illustrates perhaps a wider use of the word; but perhaps may be brought into connexion with the Phrygian thalassocracy in our List.¹² But the proper sense of the word seems to be clear: a state was said *θαλασσοκρατῆσαι*, if it practically 'ruled the waves' for a period of years: the circumstances under which 'sea-power' in this sense passed from one state to another might vary; but posterity might without difficulty lay its finger on this or that occurrence as marking such transferences of sea-power; and it was probably in some such rough-and-ready way as this that our list came into existence originally.

§ 2.—The Date of the Composition of the List.

Another passage of Strabo throws a little light on the circumstances under which the attention of scholars, and others also, had been imperiously

⁴ ταῦτα μὲν οὖν ἐπράχθη πρὸ τῶν Τρωικῶν μετὰ δὲ τῆς Τροίας ἔλκετο Κῆρος ἀνεγίνετο ἐπὶ πλείοις ἰθαλασσοκράτησιν, καὶ τῶν Κυκλάδων τῆσαν κρατήσαντες, τίνας αὖτε ἰδίᾳ κατέχον καὶ τοὺς ἐν αὐταῖς κατοικοῦντας Κρήτας ἐξέβαλον, τίνας δὲ κοινῇ μετὰ τὴν προειρηνημένην Κρήτης κατακράσαν. Ὀστερον δὲ τῶν Ἑλλήνων ἀνεγίνετο, συνέβη τὰς πλείους τῶν Κυκλάδων εἶσαν ἀποσπῆσαι καὶ τοὺς βαρβάρους Κῆρους ἐξ ἀγῶν ἐκπεσεῖν· περὶ οὗ τὰ κατὰ μέρος ἐν τοῖς εἰρηναίοις χρόνοις ἀναγράφονται.

⁵ *De Castoris chronica Diodori Siculi fontis ac normae*, Lübeck, 1878.

⁶ *Einführung*, p. 102, n. 3.

⁷ I. 7, 8, ff. 16-17.

⁸ II. 5, 9.

⁹ ἐκείνητος δὲ καὶ ταυτικῶν ποταμῶν Χίου, καὶ ἀνέβητο τῇ κατὰ θάλασσαν εὐνοουσίᾳ, 955 C.

¹⁰ 947 B.

¹¹ Strabo, 321 A.

¹² See p. 123.

directed to the problems of sea-power. For he uses the word ¹² to describe the reign of terror maintained by the Cilician Pirates until their suppression by Pompeius. The sudden revolution which Pompeius effected could not but strike the imagination of historians; and may well have suggested, particularly to a Rhodian scholar, the task of reckoning backwards the sequence of sea-powers, so far as tradition served; if only for the opening paragraphs of an *ἐπιδείξις*, a *laus Pompeii Magni*. The services rendered by their fleets to both sides in the Civil War were a further object-lesson in the same department of history; and it is with the triumph of Julius Caesar, that Castor's great chronography seems to have ended. There is therefore some slight probability that the List of Thalassocracies may actually have taken its final shape in the generation of Castor and Diodorus. It is also not improbable, if the subject was thus 'in the air' that more than one writer may have tried his hand at codifying these materials: in fact, that both Castor and Diodorus may have been merely gratifying a current fashion in constructing each his own List of Thalassocracies. That there was diversity of opinion, for example, as to the position of the Rhodians in the list, is clear from the statement of Syncellus; ¹³ and it is not impossible that the Rhodian sympathies of one of the compilers may have been responsible for this discrepancy.

But the List of Thalassocracies, as it stands in Eusebius' excerpt from Diodorus, and as its contents are incorporated here and there in the Eusebian Canon, presents two features which suggest an earlier and more instructive origin. It begins with the fall of Troy, ignoring Minoa, and the pre-Achaean thalassocracies recorded by Diodorus himself, and others; and it ends with the Persian War, ignoring all subsequent sea-powers from the date of the 'crossing of Xerxes': that is, from the point at which Aegina had to make up its bitter feud with Athens, and acquiesce, as the event proved, in a thalassocracy which was ultimately Athenian. The list thus covers exactly the period reviewed by Thucydides in his introduction to the history of the greatest of Greek thalassocracies, the Delian League; and the allusive character of Thucydides' survey, the emphasis which he lays throughout on the revival of sea-power as a symptom of the growth of Hellenism, and his selection of Samos and Phocaea ¹⁴ as types of early Greek advancement between these terminal points, suggest that he presumed his reader's familiarity with some such catalogue of sea-powers, as a rough outline or conspectus of the main subdivisions of the period.

The procedure of Thucydides does not of course prove in the least that the list preserved by Eusebius is of fifth century date; though the mention of Samos and Phocaea favours such a possibility. But it does suggest strongly that in the Periclean Age *some* such list was extant; and the circumstances of the Delian League, and the concentration upon Periclean Athens of so many converging lines of historical development, provide just such a provo-

¹² 988 A, B.

¹³ See p. 99, below.

¹⁴ 1. 18 ἀναστάτα γὰρ ταῦτα τῶν ναυτικῶν ἦν.

cation to compile such lists, as the events of Castor's age provided, for its rehabilitation and revision later on.

Now we are fortunately situated for testing, after a fashion, the antiquity and the historical value of the extant list. Nothing is more characteristic of Diodorus, in a general way, than his dependence upon fourth century sources, and in particular upon Ephorus and the Isocratic school of history-writing; and nothing is more characteristic of this school than its systematic revolt against fifth century tradition. Thucydides in this respect stands right upon the dividing line; regretting the 'vulgar errors'—not always so erroneous either—of Herodotus and other 'ancient authorities'; but protesting no less vigorously against the slipshod rhetoric which he foresees in the 'new school.' But Herodotus is as pre-Thucydidean as he is pre-Socratic. Though for him also the Trojan and the Persian Wars open and close a great period of the world's history, and though his life and mind are wholly of the generation which was first capable of making such a retrospect as the List of Thalassocracies presents, there is no trace, from beginning to end of his book, of any such scheme of classification by sea-power, or even of any theory of sea-power such as the List of Thalassocracies presumes. On the contrary, on the one occasion when he mentions the word, it is to contrast Polycrates, *πρώτος τῶν ἡμεῖς ἴδμεν Ἑλλήνων δε θαλασσοκρατεῖν ἐπειρόθη*, with Minos *καὶ εἰ δὴ τις ἄλλος πρότερος τούτου ἤρξε τῆς θαλάσσης: τῆς δὲ ἀνθρώπινης γενεῆς Πολυκράτης πρῶτος*:¹⁶ so that there is even some reason to suppose that Thucydides, in selecting, for mention along with Samos, Phocaea, its immediate predecessor (as it happens) in the Eusebian list, may be gently reproaching Herodotus for another of his 'vulgar errors.'

Now if, as seems probable, there was a fifth century 'List of Thalassocracies,' and if Herodotus did not know of it, while Thucydides apparently did, we are in a position to fix the date of its composition within fairly narrow limits; for Herodotus was in Athens, and on the fringe of the Periclean circle, as late as 444 B.C. or thereabouts; and Thucydides was already getting his materials together and adjusting the perspective of his prologue, in the years immediately succeeding 432 B.C.

Again, if Herodotus did not know of such a list, and was uninfluenced by any Thalassocrat-theory, it is obvious that any data he may have transmitted about any of the states which are included in the Eusebian list will have all the value of undesigned testimony in regard to the question whether the extant list represents genuine fifth century tradition. If it disagrees with the Herodotean data, we shall have strong grounds for assigning it to a period after the authority of Herodotus had become discredited, that is, to a date not earlier than the end of the fifth century. If, on the other hand, it agrees with the Herodotean data, it will be clear that it has not undergone any serious modification at the hands of Ephorus or any other of the normal sources of Diodorus; and we shall have important confirmation of the suspicion suggested by its aposiopesis at the 'crossing of Xerxes.' If finally we find

¹⁶ II. 122.

A	B	C	D	E	F	G	H	I	J
		Diogenes quoted by Eusebius, <i>Chronicon</i> I, p. 105 Mac, p. 225 Schreiner.	Synopses (—) shows that the name is given, but the numeral omitted.	Eusebius' Canon, swept from Abraham, and duration of his power.	Jordan's Canon, swept from Abraham, and duration of his power.	Eusebius' dates, reduced to years A.C.	Jordan's dates, reduced to years A.C.	Wise's dates, years A.C.	Dates and intervals now proposed.
O	[Cetes]			848	843	1168	1174		1184 128-138 1058-1040
I	Lydi (qui et Massina)	92	[—]	92	[—]	99	118		22 964-954
II	Pelagi	85	85	85	[—]		92, 90, 90		85
				[Lucius is Aris. Version, 100-1080]		{ 1000 } { 1030 } { 1055 }	{ 1007 } { 966 } { 941 }		879-869
III	Thrace	79	79		10		98, 41, 40		79
					1101		915	757	800-790
IV	Rhodii	33	22		23		23	23	23
				1113	1123	903	893	793	767-757
V	Phryges	25	25 or 4	25	25 (20)		25	25	25
					1152		864	769	742-732
VI	Cyprii	83	[—]		23 (32)		23	33	33-23
				[Jordan is Aris. Version, 1107-1200]	1180		850	670	700
VII	Phoenices	45	[—]		45		52	45	45
					1233		783	631	664
VIII	Aegyptii	—	[—]	—	[—]		75	28	60
					1268		748	603	694
IX	Milesi	—		—	18		28	18	18
				1286	1296	730	729	587	
X	[Cetes]	—		61	[—]	39	29	0	
				1345	1345	671	671	587	
XI	Isidri	—		[90]	68	90			
				1441		675			378
XII	Phoenices	44	44	44		43			44
				1486		580			584
XIII	Sami	—	[—]	XVI		17			17
				1503		513			517
XIV	Isidri	2	12	2		2			2
				—					515
XV	Naxii	10	10	—		511			10
				1505		20			505
XVI	Eutricum	15	7	15					15
				1533	1508	485	508		490
XVII	Aegiacae	10	10	10	20				10
									480
A	B	C	D	E	F	G	H	I	J

that its contents, though consistent with the fifth century data, are inconsistent with the statements of Diodorus and other post-Ephoran writers; that, in order to make them fit the later systematic chronologies, the list had to be literally dismembered; and that, even so, its data had to be frequently ignored; then we shall be in a very strong position indeed for asserting that the extant list represents essentially a genuine fifth century document, of Periclean date and authority; and we shall be supplied with a new and (I think) very valuable instrument for recovering the fifth century view of the earlier history of Greece.

The objective value of the information contained in the list is of course a separate question. It can only be decided by comparison with independent chronological data; but though our conclusions differ in detail, I venture to think, with Dr. Winckler, that our knowledge of the history of the Nearer East is by this time sufficiently accurate and full to justify a renewed attempt to test the historical value of this list, the only chronological document, other than personal genealogies, which attempts a perspective of the 'dark age' of Greece. The last serious attempt to interpret the list was that of Dr. Goodwin in a brilliant little paper printed in 1855; and it will be seen from what follows that while the method of enquiry remains the same, the new data, which have become available meanwhile, put a very different face on the matter.

§ 3.—*The Text of the List, and its use by Eusebius.*

Our authorities for the list, and the data which they preserve, are tabulated on p. 88. The notes and criticisms which follow are intended to throw some light on the relation in which these authorities stand to one another, and to justify certain inferences as to the light in which Eusebius and his followers interpreted the list, and as to the state of the text of it in Eusebius' time and earlier.

Columns A B C give the substance of the list as it is quoted from Diodorus in the Armenian version of the *Chronicon* of Eusebius.¹⁷ The introductory words are as follows: *Iam inde ex Diodori scriptis, breviter, de temporibus Thalassocratiarum qui mare tenebant. Post bellum Troianum mare obtinuerunt* . . . ; then follows the list of seventeen names; or rather sixteen, with a lacuna in place X, where the Canon, as we shall see (p. 91), inserts the name of the Carians. Following the name of the Aeginetans in place XVII are the words '*usque ad Alexandri transmissionem*.' The word rendered *Alexandri* is taken by all the editors as a scribe's blunder for *Xerxis*; and the phrase is obviously intended to refer to the Persian War of 480-479 B.C. The Armenian orthography presents no serious difficulty: *Pelazgi*, *Phrygii*, *Melesseni*, and *Aeacritri* are easily identifiable with the help of the corresponding entries in the Canon (v. below).

It is important to note that in the column which gives the duration, in

¹⁷ I use throughout Schoene's edition of Eusebius, 1875-86.

years, of each 'sea-power' the numerals are missing in places VIII, IX, X, XI, and again in place XIII; for we shall see reason to believe that these represent a real and early lacuna in the list, which at its middle point involved damage to the name-column also, and led to uncertainty as to the reading *Cares* in place X.

Column D gives the evidence of Syncellus, who inserts, at their proper places in his chronology, certain of the same names and numerals, and also the numerical order of each name as given in *Col. A*.

In places II, III, IV, V, XII, XV, XVII he gives complete information agreeing in all points with Eusebius' Excerpt. But in places I, VI–XI inclusive, and XIII he omits the numerals; and in places IX, X, and XI even the names, just where the corruption in Eusebius is deepest. He also presents a few aberrations, which are worth notice, as illustrating certain difficulties of transmission, which are peculiar to such a list as this.

(1) In place IV he notes the Rhodians; but adds *κατὰ δὲ τινας πέμπτοι*. This may be a real variant; but it may also be the expansion of a dittograph of the *πέμπτοι* of place V, immediately following.

(2) That the latter is more probable is suggested by his comment on the Phrygian numeral in place V, where he gives, as well as the Eusebian numeral 25, the variant 'or 6.' Here also we seem to have the ordinal numeral of place VI carried up into the sentence before.

(3) In place XVI, for the 15 years of the Eretrians, he gives 7 years. But note here also that in his copy the Greek numerals ι , κ , λ , ϵ , ζ , ϵ came in close proximity; and a very slight confusion among these would bring a ζ , unaccompanied by an ι into the place where it stands in his version. The numeral ζ (7) for the Eretrians is in any case unsupported, and is also inconsistent with the external evidence, as we shall see later on.¹⁵

(4) In place XIV, for the 2 years of the Lacedaemonians he gives 12. Here also the presence or absence of a single stroke (ι = 10) makes all the difference; and the true figure is the only one out of the last twelve in the list, which does not thus begin with ι ; but though Syncellus' variant is unsupported, it may very likely have originated in an attempt to solve a real chronological difficulty, which we shall have to consider later on in its proper place.¹⁶

Column E gives the entries from the Canon of Eusebius, so far as it is preserved in the Armenian version. The numerals opposite the sea-power-numerals of *Cols. C D* are the sea-power-numerals wherever they are given in the margin of the Canon. Wherever they are so given they agree with those in the Excerpt; but they are missing, just as in the Excerpt, in places VIII, IX, and XIII; and in places VIII and IX even the names are omitted. In place XI, where the Excerpt is silent, one manuscript only gives the numeral 96, an obvious attempt to fill the gap by calculating the difference between the initial and the terminal year ($1441 - 1345 = 96$).

A curious error of this version, in place XIII, in the entry respecting the Samians, gives us one more piece of evidence. In place of the ordinal numeral

¹⁵ P. 97.

¹⁶ P. 29.

XIII, the numeral XVI is given, which makes nonsense as it stands. Now this cannot have arisen from any mere contamination with numerals above or below it, for none of these provides the materials for such a mistake. But we shall see, when we come to consider the historical evidence, that the Samian sea-power probably began with the rise of Polycrates, and this event is dated by Eusebius to the year 1484 (=532 B.C.) and by Jerome to 1487 (*v.l.* 1485: i.e. to 531 or 529 B.C.), and that its close is dated by Eusebius to 1503 (=513 B.C.: Jerome is silent). Consequently the duration of the Samian sea-power if estimated by subtraction would amount to either 17 years or a little less. How much less, we cannot tell precisely in the absence of the terminal figure in Jerome's version of the Canon. It is possible therefore that this numeral XVI, standing where it ought not, represents an attempt to calculate the duration numeral of the Samians by simple subtraction, in the way already described. We shall see further on, however, that the numeral 10 or 17 in this place is very probably correct; and it may even have stood on the edge of the lacuna in the original of Eusebius' Excerpt.

The places III—IV and VI—VII fell on pages which are missing altogether in the Armenian version; these gaps however only cover the years 1031—1099 and 1167—1120; and so cannot be invoked to explain the silence of this version in places VIII and IX. This silence therefore is due to the same lacuna in the Excerpt as is exhibited in our text of it: and we may therefore infer that this lacuna goes back to Eusebius' time, and very probably existed in his copy of Diodorus.

On the other hand, in place X, where the Excerpt is silent even in the name-column, the Canon gives the name of the Carians, and the numeral 61. This numeral may have arisen by a process of subtraction like that suggested above in the case of the Lesbian numeral; but the correspondence is not quite exact, for the difference of years only amounts to 50. We shall have to return to this Carian numeral at some length, when we come to compare the external evidence.²⁰

Column G gives the equivalents, in years B.C., of the Eusebian dates which are given under the 'year of Abraham' in the Canon and in Col. E. Between these dates I have given, in *italic* numerals, the actual intervals, obtained by subtraction, wherever adjacent dates are preserved. From a comparison of these intervals with the duration numerals given in the Excerpt (Col. C) and in Syncellus (Col. D), as well as in the margin of the Canon (Col. E), it is clear that the two sets of data are quite independent of one another. The only case in which they agree exactly is that of the corrupt Lesbian numeral in place XI, and here borrowing is evident; only in three cases do they approximate even within a year or two, as in places X, XII, and XIII, and in both X and XII the Excerpt is deficient likewise.

It seems to follow from this that, so far from accepting the list which he took from Diodorus as a continuous record of events from the Trojan War to the Persian War, Eusebius regarded it merely as a collection of detached

statements as to the length of sea-power enjoyed by each state separately, while constructing his general chronology on quite different lines. The result is that sometimes he placed consecutive thalassocracies so as to overlap in his Canon, as in the case of the Lydians, who held sea-power 92 years, yet were succeeded by the Pelasgians after only 80; sometimes there was a gap between them; for example, the Phocaeans had sea-power for 44 years, but were not succeeded by the Samians till after the lapse of 45. In the case of the Eretrians, who held sea-power for 15 years, but are given in the Canon 26 years, from 511 B.C., there has obviously been a blunder, caused by the total omission of the Naxians, whose initial date, and term of 10 years, have consequently been ascribed to their successors in the list. It is possible that this may also be the cause of the error of Syncellus in place XIV, if he detected the mistake about Eretria, but credited the spare 10 years to Lacedaemon, instead of allowing for the Canon's omission of the Naxians.²¹

Column F gives the dates (in 'years of Abraham'), and the duration numerals, which are preserved in Jerome's version of the Eusebian Canon. Like Syncellus, Jerome gives no numeral to the Lydians; he gives 19 years to the Thracians instead of 79; 25 (with a *et* 20) to the Phrygians; and 23 (with *et* 32) to the Cyprians instead of 33. He omits the Egyptian and Carian numerals, but gives 18 years to the Milesians, and 68 to the Lesbians. For all below this point he is silent, except that he gives 20 years to the Aeginetans instead of 10.

From all this it is clear that while his copy of the Canon had similar entries to those of the copy which underlies the Armenian version of Eusebius, and though his omission of the numerals for Egypt and Caria suggests a similar imperfection to that which we have seen to exist in the Eusebian Excerpt, either he has reproduced his entries very carelessly (as is suggested by his variant numerals for Thrace, Cyprus, and Aegina, and by his silence as to Lydia, and in places XII to XVI), or he had access to some other source, such as that from which he derived his numerals for Miletus and Lesbos.

In the case of Miletus there is the more reason to suspect this, because the numeral 18 does not agree with the subtraction numeral (which I have tabulated in *Col. H*); nor can it easily be derived by corruption from any adjacent numeral.²² It probably represents, therefore, a real contribution towards filling the lacuna in the Excerpt; and, as we shall see presently (pp. 112-5), the numeral 18 has historical probability to support it.

Column H, which serves the same purpose in Jerome's case as *Column G* in that of Eusebius, shows still more clearly how arbitrarily the compilers of the Canon, or Canons, pulled to pieces the list given in the Excerpt, and how

²¹ This incident is of interest also, in view of Schoene's view that Syncellus used the Canon rather than the *Chronicon*. Here at all events he has used the *Chronicon*.

²² The only possibility in this direction is that the Milesian original IX may have been

misread IH' (=18). For a similar confusion between Greek and Latin words and symbols see p. 105, below, and Jerome's own corruption of *ἄθλα* α into *ἄθλαμα* or *ἄθλας* nouns (*Canon*, p. 181, b); see Schoene, *Gott. Gel. Anz.* 1875, pp. 1496-7.

freely they ignored its purpose as a continuous chronological outline. Not only do his intervals differ from those of the Armenian version in every case but that of the Rhodians in place IV, where alone all authorities agree in repeating the 23 years of the Excerpt; but, wherever his numerals differ, they differ more from the numerals of the Excerpt than do the intervals of the Armenian text. Whether the reason is, as Schoene suggests in a recent essay, that Jerome was using a later and maturer edition of the Eusebian Canon than that on which the Armenian version is based, or whether these variations are Jerome's own contribution to chronology, the conclusion to which they point is the same: namely that Jerome had no more idea than Eusebius of treating the List as an organic whole. He was simply quoting extracts from it under the title of the several states which he names; but his Canon-dates for the sea-power of those states are derived from quite different sources.

The dates given by Jerome differ, also, from those in the Armenian version, in every case but that which divides the Carian sea-power from that of Lesbos, i.e. 1345 (= 671 B.C.). Above this point, and apparently as far back as the date between Rhodians and Phrygians (1113 = 903 B.C. in Eusebius) (1123 = 893 B.C. in Jerome), the dates given by Jerome would seem to have been ten years later: probably because he allows only 49 years instead of 59 to the Carians in place X. Though the Armenian version is wanting in place IV, the evidence of Syncellus as to the lost Eusebian text, and the circumstance that here alone all authorities agree on an interval, and a thalassocracy, of 23 years, suggest that the same relations existed between the two Canon-dates here also.

But above this there is chaos. In place III Jerome assigns no less than three separate dates to the initial year of the Thracian sea-power. Two of these (AA 1050 and AA 1055) fall within a missing page of the Armenian; but the third and earliest does not, and receives no support, even allowing for a ten years' discrepancy, from the Armenian text. Nor do any of Jerome's intervals (92, 41, or 46) correspond either with his duration-numeral (19) or with that of the Armenian version; and these discrepancies are in no way explained by those in places II and I. Nor,—and this is most curious of all,—though the Excerpt in its present form plainly dates the Lydian sea-power *post bellum Troianum*, does either the Armenian version or Jerome make it begin from the Fall of Troy; but Jerome ten years later, and the Armenian sixteen.

Below place X, Jerome, as we have seen, gives no data until AA 1508 (= 508 B.C.), to which he assigns the beginning of the Aeginetan sea-power. Now, as he assigns 20 years (instead of 10) to the Aeginetans, he must have put their loss of sea-power in 488 B.C. Yet this is not, on any reckoning, the date of the *Xerxis transmissio*. The Armenian version, on the other hand, though giving the Aeginetans only 10 years, as in the Excerpt, dates the beginning of their sea-power from 485 B.C.: its end therefore cannot fall earlier than 475 B.C.; yet this date is no more that of the *Xerxis transmissio* than is 488 B.C. Here again, therefore, the plain chronological statement,

which concludes the Excerpt, has been ignored in both versions of the Canon alike.

All this looks hopeless enough; but it looks so, as we have seen, simply because of the view which both the Armenian text and Jerome chose to take of the character of the information in the Excerpt. We have seen, however, that apart from two discrepancies on the part of Jerome (in places III and XVII), at points where fortunately the Excerpt, Syncellus, and the Eusebian Canon are agreed, the Excerpt which each had before him was substantially the same, so far as they have quoted it; and also that all copies of it contained much the same lacuna round places VIII-XIII.

§ 4.—*The List as a Scheme of Chronology.*

What we have next to consider, therefore, is whether these late writers were right in their view of the meaning of the list; or whether they would not have been wiser to have taken the list as an organic whole, so far as it goes, and as an attempt to classify the centuries *usque ad Xerxis transmissionem* by dead-reckoning backwards from this terminal event.

If this was the real character of the list, it ought to reveal itself on a comparison of the data contained in it with such evidence as to the sequence of events as can be derived from other sources; and if, as I have suggested, it bore this character as early as the fifth century, then it ought to stand comparison with other fifth century sources; that is, for practical purposes, with the narrative of Herodotus. What I propose to do next, therefore, is to make this comparison, beginning at the lowest point in the list, and working backwards as far as either the list or Herodotus will serve us.²⁵

But obviously the existence of the great lacuna from place VIII to place XI, and its probable continuation in place XIII, precludes all possibility of dead-reckoning backwards from the dates below the lacuna to those above it. On the other hand, if it should be possible to find any fixed point among the dates above the lacuna, it ought to be possible to build up provisionally a reconstruction of the lost dates. The problem, therefore, with which we are confronted is really threefold. First, we have to determine, as I suggested to begin with, by comparison with fifth century sources,—that is to say, practically, with Herodotus,—whether the dates below the lacuna are real dates, or at all events whether they represent fifth century tradition about leading events in the sixth century. If they do not, then the list may be set aside as neither better nor worse than any other part of the information which comes to us, unascribed, through Diodorus. But if they do,—if, that is, the

²⁵ I have purposely confined myself in the text to purely Herodotean evidence; but, for completeness only, have added later evidence in the footnotes. It does not however contribute much. The whole question was admirably handled long ago by Prof. W. W. Goodwin, *De potentia veterum grecorum historiarum epochis*

apud Eusebium, Göttingen, 1855. I owe much, in what follows, to this brilliant essay, though I only became acquainted with it when revising the present paper for the printer. It is only where it relies upon non-Hellenic history that it is antiquated by subsequent discoveries.

List represents a lost fifth century original, then it will be worth while to go on to attack the *second* problem. Here, though for Egypt and Phoenicia Herodotus will still be of importance, the comparison will be mainly with a different class of testimony, namely the contemporary history of the eighth and seventh centuries as it has been recovered from the annals of Assyria and New Babylonia; and it is here that we shall have to acknowledge the suggestive hint of method supplied by Dr. Winckler's paper. *Thirdly*, it is only if we are able to establish the historical character of the List for this remoter period, that it will be worth while to attempt either to fill up the lacuna which intervenes, or to discuss the problems raised by the discrepancy between the heading of the List as it stands and the commonly received opinions about the period which succeeds the Trojan War.

§ 5.—*The Sea-power of Aegina, 490-480 B.C.*²⁴

The lower members of the List, as far back as the lacuna, have obviously a general appearance of authenticity. The sea-power of Aegina lasts ten years, and extends *usque ad Xerxis transmissionem*; and this date ought to mean, on the current reckoning, the year 480. But actually Eusebius reckoned from 475, and consequently placed the beginning of the Aeginetan sea-power in 485; while Jerome put the beginning of his twenty-year period in 508, and consequently must have reckoned it to end in 488. Now if the List really started from 475, it would indeed have the advantage of starting from the point at which the greater Thalassocracy of Delos superseded all others; and it was probably some such consideration as this which influenced Eusebius in his selection of his terminal date. But even though the Aeginetans received the prize of valour at Salamis,²⁵ it is difficult to see how the five years which followed could be credited to them; for Athens had already a far larger number of ships at Salamis; and the command of the pan-Hellenic fleet was continuously in the hands either of a Spartan or an Athenian.

There are two further reasons why the year 480 is inevitable as a starting-point in our backward reckoning. *First*, by no possibility can a thalassocracy of Eretria (in place XVI of the List) be prolonged after the destruction of that city by Datis and Artaphernes in 490. *Second*, it was apparently very close to the year of Marathon, that the death of Cleomenes, and an anti-Athenian reaction in Sparta, untied the hands of Aegina, and led to the agitation for the return of the hostages from Athens.²⁶ The result was the resumption of ἀκήρυκτος πόλεμος between Aegina and Athens,²⁷ just at a moment when the hopes of every medizing state and faction in Greece were raised high by the coming of the Persian expedition. This ἀκήρυκτος πόλεμος must have

²⁴ Henceforward, for brevity and convenience, I omit the 'years of Abraham' and give all dates in years B.C.

²⁵ Hdt. viii. 93.

²⁶ Hdt. vi. 85-87.

²⁷ Hdt. xi. 94.

lasted nearly twenty years in all; but though after 490 Athens is upholding the cause of Eretria (deceased) under extreme difficulties, yet as we approach 480 it is Athens who is preparing for a decisive struggle with her rival. At the moment of Xerxes' expedition the situation was most critical—it was the greatest quarrel in all Greece, as Herodotus says²⁸—and how difficult it was for Aegina, we may judge from a comparison of the two squadrons at Salamis: Aegina brought 30 ships, Athens 180.²⁹

We may therefore take the year 490 as the year of the transference of thalassocracy from Eretria to Aegina; and reckon the ten years assigned by the List to Aegina as running, in the words of the Excerpt, *usque ad Xerxis transmigrationem*. We may infer, also, that in the mind of the compiler of the List the five years from 480 to 475 were either reckoned as an interregnum, or were assigned to the Thalassocracy of that Pan-Hellenic League which Delos and Athens claimed later to perpetuate. We have thus a sure foundation in the double dating 499–480, and can safely proceed to build upon it so far as the List will allow.

§ 6.—*The Sea-power of Eretria. 505–490 B.C.*

The Eretrians 'rule the waves' for fifteen years, according to Eusebius. They must therefore have begun not later than 505 B.C. Now though Athens sent the larger force to Ionia in 500, Herodotus lays some stress on the contingent from Eretria,³⁰ and emphasizes the *pulas* which bound Eretria to Miletus, as the real reason of their mission. Eretria therefore was of some peculiar importance in Greek waters at the time of the visit of Aristagoras; and it is not necessary to scratch very deep into the phil-Athenian veneer of Herodotus' history to discover that it was Eretria, as the event proved,³¹ and not Athens, which from the Persian point of view was the primary objective of the expedition of 490. What the Persians could not well foresee was that, thanks to Themistokles and some others, the little finger of Athens would be thicker than the loins of Eretria.

Now the date 505, which, according to the reckoning of the List, is the initial year of the Eretrian sea-power, falls a year or two later than the last act of the Peisistratid drama in Athens; and it was in this last act that the Athenians *ἐς ὅσπερ ἐμελλοι μὴ μὴν ποιεῖσθαι Βοιωτῶν καὶ Χαλκιδῶν*:³² with the result which Herodotus describes as the Double Battle on the Euripus. Chalcis fell, and received an Athenian cleruchy; and all this happened about the time of the reforms of Kleisthenes, and a little before the

²⁸ Hdt. vii. 148.

²⁹ Hdt. vii. 48. Compare Strabo, 375. αἰὲν ἦ ἱερὸν [ἢ Αἰγῶν] ἡ καὶ θαλασσοκρατήσασα πορὶ καὶ περὶ πρυμνίας ἐκρησθηθήσασα πρὸς Ἀθηναίων ἐν τῇ περὶ Σαλαμίνα ναυμαχίᾳ κατὰ τὰ Περσικά.

³⁰ Hdt. v. 99.

³¹ See Goodwin, *l.c.* 87. *sup.* Hdt. vi. 43.

ἐνυπνίσθητο δὲ εἰς τοὺς Ἐρετρίους καὶ Ἀθηναίους: *cf.* vi. 94, 98, 100, 101. He notes also that when the Athenians retired from Ionia in Hdt. v. 103, there is no mention that the Eretrians retired too; and infers, not improbably, that they stayed. They did not, however, fight at Lade.

³² Hdt. v. 74–77.

visit of Aristagoras. We have no precise date for the 'Double Battle'; but three points are clear: it fell somewhere between 508 and 500; it involved the cooperation of *somebody's* fleet for the passage of the Euripus; and it had the effect of paralysing for a generation the agelong rival of Eretria. I think we can hardly doubt that here also we have the glowing Athenian version of an affair which had more than one aspect; and that what the *ἔθνεα Βοιωτῶν* inscription really commemorated was an event, which an Eretrian would have described as the establishment of Eretrian sea-power, and the reversal of the verdict of the Lelantine War. At all events Herodotus' narrative and the date 505 for the Eretrian Thalassocracy shed a very interesting light on one another, and increase the probability that the numeral 15 in the Excerpt is right, and the 7 of Syncellus wrong.²²

Note also that it was very shortly after 505, that Thebes, deprived of the aid of Chalcis, began to negotiate for that of Aegina against her amphibious enemy; and shortly after this, again, that the *ἀσπυκτός πόλεμος* began. The effect of the latter was to cut off Athens from Eretria, so far as the Sunium-route was concerned, and to retard by ten years or more the rise of an Athenian sea-power; but inevitably, also, to throw Aegina's Saronic rival, Corinth, into the most benevolent of neutralities towards Athens. How far is all this the consequence of the entanglement of the newly-won sea-power of Eretria in the affairs of Aristagoras of Miletus, a very poor imitation of the Thrasybulus who was the 'friend of Pericles' of Corinth, nearly a century before?²³

§ 7.—*The Sea-power of Naxos. 515-505 B.C.*

The predecessor of Eretria, however, is not Chalcis, but Naxos, with a sea-power of ten years' duration. Herodotus has not much to say in his history about Naxos; but all that he does say is entirely to the purpose.

The proximate cause of the Ionic Revolt, he says, was a recent change in the balance of power in the Cyclades. The *παχέας* of Naxos had been expelled;²⁴ and this offered, from the point of view of Aristagoras, a favourable opportunity for establishing with their aid a Persian protectorate over the islands. Clearly, too, the same events which had expelled the *παχέας* had also favoured the democratic party in Naxos itself. What were these events, and how do they bear upon the transfer of supremacy at sea from Naxos to Eretria?

Of the previous history of Naxos we learn from Herodotus only this: that one of the consequences of the establishment as *τύραννος* in Athens of Peisistratus, whose immediate base of operations had been in Eretria,²⁵ had

²² Goodwin, *l.c.* 98 refers to this same success the great Eretrian *νενίκη* described (without date) in Strabo 418. The passage certainly includes a reference (*ἐκτρέψε*) to the establishment of a regular hegemony over islands, and, in particular, over Andros, which

had been under Naxos recently in 501; see Hdt. v. 71 and ii. 42 below.

²³ Hdt. i. 20 v. 92, and p. 111, below.

²⁴ Hdt. v. 80.

²⁵ Hdt. i. 61.

been the establishment of his protégé Lygdamis as *τύραννος* of Naxos;³⁷ and presumably the expulsion of a more or less oppressive oligarchy from the island. And now we find that shortly before 500 the *παχέεις* or oligarchy of Naxos had been expelled by a democratic rising, and were trying to get help from Miletus, which, though apparently phil-Eretrian, had been since the days of Cyrus consistently loyal to Persia.³⁸ Now unless the Peisistratidae were installed, or at least expelled, very much later than is commonly supposed, these two data can hardly refer to the same crisis in Naxos. But if they do not, then we are authorized to infer a third fact: namely the collapse of the *τυραννίς* of Lygdamis, and the re-establishment of a government of *παχέεις* in Naxos: for unless they had returned to power in the interval, they could not have been expelled shortly before 500, in the circumstances stated by Herodotus. We get, consequently, the following outline scheme for the history of Naxos in the sixth century:—(i) oligarchic régime, lasting down into the Peisistratid period, and presumably not phil-Eretrian; (ii) the *τυραννίς* of Lygdamis, under Peisistratid, that is phil-Eretrian, protectorate; (iii) oligarchic counter-revolution, presumably not much earlier than the collapse of the Peisistratid tyranny, and probably anti-Eretrian; (iv) renewed democratic activity, and appeal of the *δαιγρές*, as usual, to Persia, through the intermediation of Persia's chief naval dependency in the Aegean, namely Miletus. We begin to see some light on the circumstance that Aristagoras simultaneously divests himself of his philo-Persian *τυραννίς*, and secures for a democratic movement in Miletus the sympathy and the assistance of Eretria.

All this suits very well the data supplied by the List. The fall of Lygdamis, and the return of the oligarchs to Naxos, if it occurred about 515, would come to us as an early symptom of that Peisistratid decline which came to a crisis somewhere about 510. And in 505, or soon after, one of the first results of the fall of Chalcis was to set Eretria free to support its ancient protégés, the Naxian *δῆμος*, in a second expulsion of their oligarchy.

Finally, to clinch the connexion between Naxian sea-power and the Naxian oligarchy, let us return to the advantages held out by these *παχέεις* as the price of the support of Persia. Naxos, they say, has 9,000 hoplites—Athens had only 13,000 at the height of her power—*καὶ πλοῖα μακρὰ πολλὰ*³⁹; and enjoys a hegemony over Paros,⁴⁰ Andros,⁴¹ and the rest of the Cyclades.⁴²

³⁷ Hdt. I. 64.

³⁸ Note in passing that *τυραννίς* within the limits of the Persian Empire meant something totally different politically from *τυραννίς* in a free Greek *πόλις*. It was in fact essentially anti-democratic, a *forcible oligarchy-of-one*. Hence the Ionic Revolt begins with a wholesale *τροπή* *καὶ ἀντιστάσις* and the establishment of *ἰσοκρατία* in Miletus, Hdt. v. 37, 38, and is appressed by a wholesale recognition of *ἡγεμονία*, Hdt. vi. 43.

³⁹ Hdt. v. 80.

⁴⁰ Incidentally we see here the significance

of Miltiades' attempt to annex Paros, as soon as Athens is beginning to see her way through her entanglements with Aegina. She is picking up the pieces, as elsewhere, of the Eretrian *ἀρχή*.

⁴¹ Yet in Strabo, 448 (p. 97, n. 33, above), Andros is reckoned as a tributary of Eretria. It would obviously be one of the cornerstones of an Eretrian sea-power; and a considerable *ἀρχή*, in the hands of Naxos.

⁴² The fact of a Naxian sea-power is admitted also in Diod. v. 52: see also Suidas, s.v. *Ναξικοπότης αὐτῆς ἀρχῆς*.

§ 8.—*The Sea-power of Lacedaemon.* 517—515 B.C.

It is above this point that our serious difficulties begin. The variation of the numeral (2 in Eusebius, 12 in Syncellus) is not hard to explain, for the omission or addition of ι in the combination of $\iota\beta$ is only too easy. But which figure is right?

If we had the Samian numeral, which precedes it, it would be easy to decide: for, as we shall see, we have fairly good evidence for the date of the fall of Phocaea, which gave the Samians their chance, and for the rise of Polycrates, which enabled them to seize it. But the Samian numeral is missing in the Excerpt; and though we shall be able to make out a fairly good case for the numeral 16 or 17, it is only on the hypothesis that Syncellus is wrong that we are justified in restoring it in the Excerpt. We are therefore thrown back on external evidence mainly, both for the Lacedaemonian and for the Samian sea-power.

If we had any accurate dates in Spartan history during this period, we might be able to piece together the evidence for Spartan sea-power, in a form which would test conclusively the data of the List. But none of the three events which postulate such a sea-power at all, is very precisely fixed. (1) The Libyan expedition of Dorieus⁴² does indeed satisfy the conditions positively. Unless the fall of Sybaris can be displaced from 510, Dorieus' first expedition cannot have set out later than 514, or earlier than 517. (2) The expedition of Anchimolius to Attica⁴³ is usually put later than 515; but it is not precisely dated; Herodotus is much more prone to compress than to stretch his intervals; and we have seen already, in the case of Naxos, that the decline and fall of the Peisistratidae may have been a slower affair than is usually supposed.

(3) The Spartan expedition to Samos causes greater difficulty, and involves once more the chronology of the next state upwards on the list. It presumes a considerable degree of sea-power on the side of Sparta: it was, as Herodotus contends, an elaborate and important affair; and it is dated by him with some precision: for he says that it occurred during the $\tau\upsilon\pi\alpha\nu\iota\varsigma$ of Polycrates, and about the time of Cambyses' expedition against Egypt. On the strength of this, Lepsius long ago assigned it to 527; which would just bring it within the 12 years given by Syncellus, if reckoned back from 515; and Goodwin accepted this date.⁴⁴ But there is no good reason to assign to it on this ground an earlier date than 522 or 521;⁴⁵ and Syncellus' variant, if intentional at all, may very well be intended to include this famous incident within the period of the Spartan thalassocracy. But Eusebius' own

⁴² Hdt. v. 42.

⁴³ Hdt. v. 63 $\pi\acute{\epsilon}\mu\pi\tau\epsilon\upsilon\sigma\iota$ $\beta\acute{\epsilon}$ $\tau\alpha\upsilon\tau\epsilon\upsilon\varsigma$ $\sigma\alpha\rho\acute{\alpha}$ $\theta\acute{\alpha}\lambda\alpha\sigma\sigma\alpha\varsigma$ $\pi\lambda\omicron\iota\sigma\iota\sigma\iota$, and in sufficient force for their retreat to be in no danger, once they had re-embarked.

⁴⁴ Lepsius, *Berl. Monatsh.*, May, 1854, p. 217. Goodwin, *De potentiae veterum gentium maritimarum epochis apud Hæmolicum*, p. 63.

⁴⁵ Diodorus i. 68 assigns the expedition to Ol. 63. 3 (=521 B.C.)

date for the Spartan expedition (Ol. 64.1 = 519 B.C.) is itself too high to fall within a two years' thalassocracy, if those years ended in 515.

We are therefore reduced to a choice of three views. (a) Syncellus may be right, in principle at all events, and the Spartan sea-power may have to be extended upwards. As we have not the numeral for the Samian sea-power, we cannot disprove this: all we can stipulate is that the date shall not be higher than to cover the Egyptian expedition of Cambyses, and that it shall not conflict with any other evidence as to the sea-power of Polycrates.

(b) Or there may have been an interval between the negotiations of Polycrates with Cambyses and the Spartan expedition to Samos. In this case the Spartan expedition may have fallen appreciably later than the expedition of Cambyses, and the real reason of Cambyses' neglect to help Polycrates may have been his death and the chaos into which thereupon the Persian Empire fell. In this case, it may very well have been the last desperate excesses of Polycrates which brought the Spartans to Samos, at the head of a mixed force of Corinthians and others, as the instrument of the general indignation. If the Spartan expedition were thus the 'beginning of the end' of Polycrates, it may very well have fallen within the reign of Darius, and not very long before the final suppression of the Samian 'reign of terror.' In this case the so-called Spartan thalassocracy would represent little more than an interregnum (like that of 480-476) during which Sparta nominally led a loose confederacy, brought together for a special bit of police work, but dissolved as soon as any member of it, such as Naxos, went its own way and created a genuine 'sea-power.'

(c) Or, thirdly, the Spartan expedition to Samos may not have fallen within the period of the Spartan thalassocracy at all. We must remember that though successfully landed and backed by the Corinthians, it maintained the siege only forty days, and retired unsuccessful; and that a fiasco of this kind could hardly be brought forward as evidence for a Spartan sea-power, even if it fell within the limits of date. This is the view which seems to me preferable: the Spartan expedition shows Sparta aiming at sea-power, and striking a premature and unsuccessful blow at the thalassocrat of the moment. But for the real thalassocracy of Sparta I am inclined to think (1) that we have to wait till Persia, not Sparta, had made an end of Polycrates,—shortly after the accession of Darius, and consequently not earlier than 521 and also not much later—(2) that the List is correct in assigning the two years 517-515 to this thalassocracy; and (3) that probably this short-lived sea-power with its sea-borne attack on Athens and its schemes of Libyan colonization is one of the early exploits which gained for the young Cleomenes the reputation of being ἀκρομανής καὶ οὐ φρενής.⁴¹

⁴¹ I had not the opportunity of seeing Mr. Wells' paper on the Reign of Cleomenes, in the last volume of this *Journal*, until this paper was already nearly completed; and I am not entirely convinced as yet by his arguments, preferring still to place the accession of Cleomenes on other grounds than that stated above,

in or about 517. But if the earlier date, 520, should be maintained, it would have the advantage of permitting us to include the expedition to Samos within the period of activity of that great man; though in that case it is strange that Herodotus should not have mentioned Cleomenes' name in connexion with it.

We have still to account for the dates 513-511 given by Eusebius in the *Canon*. But this is simple when we remember that his starting-point was five years too low, and that so far he has only diverged by one year from the dead-reckoning of the Excerpt. Consequently when adjusted to 480 as zero-point, his dates 513 and 511 become 518 and 516 respectively; and allowing further for the current attribution of the starting-point of the Delian League to 476 not to 475, we have as the finally revised Eusebian dates exactly the years 517 and 515 which we reached by the previous argument.

§ 9.—*The Sea-power of Samos. 534-517 B.C.*

We are now on the very edge of the lacuna in the Excerpt, and we have only external evidence to go upon; apart from the vague indications of an original numeral 16; and the Eusebian dates 530-513 (giving the revised dates 534-517) with their interval of seventeen years.

But the sea-power of Samos is so closely bound up, in ancient tradition, with the personal fortunes of Polycrates that it is natural to turn to the date of his rise as a probable *terminus a quo*, just as we have had to discuss the date of his fall to establish the *terminus ad quem*. Now Eusebius gives OI. 621 (= 533 B.C.) as the date of his accession. If this date could be shown to depend on the Excerpt we might have to revise it by four years, like the thalassocracy-dates in the *Canon*, and assign it to 537; but there is no proof of this, and we may probably take this date as independent evidence. We may therefore regard the year 533 as a probable approximation to the first year of Samian sea-power.

On the other hand Samos, in the List, succeeds Phocaea as mistress of the seas. If therefore we can fix the date for the fall of Phocaea, we shall have a precise upward limit for the Samian sea-power. Now Phocaea fell in the course of the Revolt of Pactyas, and the story of this is told by Herodotus in a context which puts it in close relation to the campaign of Cyrus against Babylon, which he gives as the reason for Cyrus' departure from the West, and the signal for the revolt. Now Babylon fell in 538, and we must consequently place the fall of Phocaea not much earlier than this, and probably somewhat later. We shall see reason, presently, for bringing down the date of the fall of Phocaea as low as we possibly can; but meanwhile let us note that we obtain from the evidence just cited a minimum interval, for the Samian sea-power, of 16 years (533-517) and a maximum of 21 years (538-517) with a certain presumption in favour of the minimum. Now the Eusebian revised dates are 517 and 534, giving 17 years interval; the *lapsus calami* of the Armenian version (p. 91) seems to indicate that it was the numeral 16 which stood in the original text of the Excerpt. Also, the case of the Eretrians,⁴⁵ and that of the Phocæans, indicate a tendency on the part

⁴⁵ In the case of the Eretrians the numerals in the latter the 19 years of the Naxians, as are 15 and 26, but he has wrongly included explained on p. 22, above.

of Eusebius, on any occasion when he adjusts the dates of a thalassocracy by the numerals of the Excerpt at all, to allow a 'year of grace' at the transition.

§ 10.—*The Sea-power of Phocaea.* 577–533 B.C.

There is no doubt about the historical character of the Phocaean thalassocracy. Thucydides names Phocaea alongside of Samos—*δυνατώτατα γὰρ ταῦτα τῶν ναυτικῶν ἦν*—and refers to repeated victories (*ἐνίκων*) over the Carthaginians.⁴⁹ Herodotus, too, knows of the Phocaean as the earliest of Greek explorers in the West.⁵⁰

Of course the whole of this westward activity did not fall within the 44 years of 'sea-power.' Eusebius for example puts the foundation of Massilia in 586, which if true makes it one of the numerous by-products of a very eventful time;⁵¹ and the phrases used by Herodotus about the early Phocaean voyages can hardly refer to periods subsequent to the 'rush to the West' in the last half of the eighth century. But the policy of transferring Phocaea bodily to its western sphere of influence would have been hardly practicable unless the Phocaean hold on the West was still strong in the middle of the sixth century. All that is in question here, however, is the period during which Phocaea was, for whatever reason, predominant in the Aegean as well; and for this the conclusive evidence is Herodotus' statement that it was Phocaea, not Samos or Miletus or Lesbos, which was regarded by Harpagus as the Hellenic ringleader in the Revolt of Pactyas; and that it was Phocaea which was provided, through the munificence of Arganthomius, with what was thought at the time to be an impregnable defence on the land-side. Phocaea in fact was, for the moment at least, the *πρόσχημα Ἰωνίης* in the same sense as Miletus later; and like Onidus, and Athens afterwards, planned to 'make itself an island;' and very nearly succeeded. Its commercial importance is further attested by the considerate offers of Harpagus⁵²; and by the subsequent jealousy of the Chians in the matter of Oenussae.⁵³

As to the chronology of this Phocaean sea-power, if the numeral (44) given in the List is right, the date, 573, given in the Canon for its beginning, is certainly wrong: for it brings the end of the sea-power down to 531, several years later than the lowest possible date for the fall of Phocaea, which we have seen to be about 534. On the other hand the 'revised' Eusebian dates

⁴⁹ Goodwin, l.c. p. 59 brings out well the force of the imperfect tense in this passage.

⁵⁰ l. 163. The later writers fill out the story somewhat. Justin's account is graphic and probably true: *namque Phocaeorum, exiguitate et paucis terras coacti, studiosius mare quam terras exercebant: pietasque, mercatusque, piramque ejam latrocinia maris (quod illis temporibus gloriis habebatur) vitam tolerabant.* 43. 3. Their loose attachment to the mainland comes out again in Herodotus' story, first, of

their voluntary exile after the revolt of Pactyas (l. 164), second, of the fate of Dionysius the Maroniot (vi. 17). Compare also Pausanias 10. 8. 6, and Strabo 172.

⁵¹ See pp. 112–3, below.

⁵² Hdt. i. 164. They recall the tactics of Alyattes against Miletus, two generations before, i. 27.

⁵³ Hdt. i. 165. *ἑρμηνεύεται μὲν αἱ αἰεὶ ἐκ πόλεως γίνεσθαι, ἣ δὲ αὐτῶν ἤσους ἀποκληρισθὲν τοῦτον εἶρεται.*

would be 534 and 578. But even 534 is a 'lowest possible,' and if for any reason the fall of Phocaea had to be put earlier,—which in the absence of a Samian numeral is quite possible,—either the upper date will have to go back higher than 578, or the Phocaean numeral, well attested as it is, will have to be regarded as corrupt as it stands. And this is by no means impossible: for it lies well within the penumbra of the lacuna in the Excerpt, and we shall see directly³⁴ that it has been partly responsible for further corruption, in the past.

§ II.—*The Lacuna in the List.*

This is as far as it is possible to go by direct reckoning upwards from the bottom of the List as we have it. It reveals the fact that wherever we can test the data in the List by external evidence, they present the appearance of genuine materials; and as our main witness throughout has been Herodotus, we may fairly claim that, if genuine at all, these data go back to at least a fifth-century source; that is to say, at least to the period of the great Thalassocracy of Delos, which is pre-supposed, as we have seen, as the goal to which the sequence leads.

But above the Phocaean sea-power, we encounter successive difficulties. For the next four places (VIII–XI) the List is very ill preserved; and even where we have the data at all, they refuse to agree with the traditional course of history.

If we accept, as above, the date 534 as the 'latest possible' for the close of the Phocaean thalassocracy, and reckon backwards from it with the numerals given in the List and in the Canon, we are confronted with the following chronological scheme:

Phocaean sea-power ends 534; lasts 44; . . . begins in B.C. 578	Eus. [—]	Jer. [—]
Lesbian " " 578; " 68 " " " "	648 " 671 " 671.	
Carian " " 648; " 61 " " " "	707 " 730 " 720.	
Milesian " " 707; " 18 " " " "	725 " [760] ³⁵ " 750.	
Egyptian " " 725 + [no numeral preserved]	" [794] ³⁶ " 784.	

Now an Egyptian thalassocracy ending in 725 would fall in the early part of the Ethiopian Dynasty,³⁷ and in the reigns of King Usorkon III. of Thebes³⁸ and King Tefnekht of Sais.³⁹ But at this time Egypt was disunited; and the Delta, in particular, was divided among a number of petty chiefs. An Egyptian thalassocracy therefore is quite out of the question at this time; and the same is in fact the case right on to the year 664, when the revolt of Psammetichos freed Egypt from Assyria, unified the country, and rapidly created that phil-Hellene and Mediterranean sea-power which was used to such effect by Necho, both for peaceful and for offensive ends.

³⁴ P. 103, below.

³⁵ Inferred from Jerome's evidence, as explained on p. 93.

³⁶ Piankhi I. reigned 748–725 or later.

Petrie, *Hist. Eg.* iii. 268.

³⁷ 755–730. Petrie, *Hist. Eg.* iii. 262.

³⁸ 749–721. Petrie, *Hist. Eg.* iii. 314.

Now no amount of adjustment of the lost Samian numeral will relieve this discrepancy in the case of Egypt; even if it were possible to bring the Phocæan dates lower; and this we have seen is out of the question. Three possibilities remain. *Either* (1) there was some reason (now lost) for assigning to Egypt a sea-power before that of the XXVIth Dynasty; *or* (2) the List, which has hitherto presented every sign of genuine historical tradition, must be thought to change its character, altogether, somewhere in this section; *or* (3) there must be something gravely wrong with the numerals for Lesbos, or Caria, or Miletus, or more than one of them.

The first hypothesis is ingeniously handled by Goodwin, who brings together evidence to show that a well-attested Greek tradition, at least as old as Herodotus, did actually dislocate Egyptian history in the period indicated by the Eusebian dates (794—750 inclusive) and assigned to the eighth century the 'Pyramid Kings' of what we call the IVth Dynasty. But this interpretation, though it throws an important light on the Egyptian narrative of Herodotus, and explains how the data in the List as we have it escaped criticism in Hellenic times, does not account for the very marked discrepancy between the Lesbian numeral and the Eusebian interval assigned to the Lesbian sea-power, and leaves out of account the cumulative evidence, which we have already collected, against the trustworthiness of the Eusebian text in this section.

The second hypothesis is a counsel of despair; and is best met by the proof, which follows in §§ 15-17, that in the places immediately *preceding* the difficult section the List *does* give accurate historical information. For if this is so, it is difficult to see why the List's authority should be bad in the seventh century, if it is good in the sixth and eighth.

The third hypothesis is that to which we have already been driven by the consideration of the textual evidence; and as soon as we begin to advance further into what I have already described as the 'lacuna' in the List, we shall find evidence accumulating rapidly in its favour. The logical procedure would be *first*, to survey briefly the historical evidence, such as it is, for the thalassocracies of Lesbos, Caria, and Miletus respectively, so as to see whether Greek tradition gives any support to the doubtful numerals; *then*, to marshal the non-Greek testimony to the historical character of the numerals above the lacuna; and *then* to return to the numerals which fall within the lacuna, to see what attempt can be made to explain their corruption, and to restore the true figures. But some repetition will be saved by anticipating the result of the second enquiry so far as will allow us to discuss the restoration of the true figures for Lesbos, Caria, and Miletus *pari passu* with our criticism of the corruptions.

§ 12.—*The Sea-power of Lesbos.*

The List, as we have seen, gives no numeral for the sea-power of Lesbos. Jerome's version of the Canon supplies the numeral 68; but as it has no entry for the Phocæan sea-power, we cannot tell what interval was reckoned

for that of Lesbos from its initial date 671. The Armenian version of the Canon assigns the same initial date; and the year 575 for Phocaea: giving an interval of 96 years. Here is a serious discrepancy to begin with.

The Canon also assigns the war between Athens and Lesbos to 611; and identifies Phrynon the Athenian general, who was killed therein by Pittacus of Lesbos, with the Phrynon who was Olympic victor in 632 (= Ol. 36). Eusebius also dates from 620 the tyranny of Periander of Corinth, who arbitrated in this quarrel; and the Eusebian dates for Alcaeus and his contemporaries go back also into the seventh century. All these dates probably stand or fall together. Whether Eusebius tried to recover a numeral which was missing in his List by the aid of Phrynon's Olympic date, or whether the numeral which he read in the List led him to his identification of the two Phrymons, we cannot now tell; but it is clear in any case that if Jerome's numeral 68 is right, Eusebius disregarded it in calculating the interval between the 'accession,' so to speak, of Lesbos and that of Phocaea.

At this point we should remember, first, that the Lesbian numeral falls within the limits of the textual lacuna: second, that the silence of Syncellus, and of the Armenian entry, as to the numeral, shows that the lacuna is at least as old as Eusebius. Can we trace the corruption any farther back?

An obscure passage of Pliny suggests that we can. Speaking of Lesbos he says *restant Eresos, Pyrrha, et libera Mytilene, annis MD potius*.⁵⁰ Now by no chronological ingenuity can Mytilene be given a *potentia*, naval or other, extending over 1500 years. But it can hardly be a coincidence that the Greek symbol ΜΔ represents the numeral 44 which stands in the next place in our List, opposite the name of Phocaea; and nothing is more probable than that in transcribing from Greek into Latin, the symbol ΜΔ should have been made into MD. I think we may fairly infer from this passage of Pliny, *first*, that Pliny had among his authorities, either all, or part, of the same List as Eusebius ascribes to Diodorus; *second* that either Pliny or his authority had this List in such a condition that the Lesbian name became associated with the Phocæan numeral, to the consequent extinction of its own.

Now such a corruption would be very much more likely to occur, if the lost Lesbian numeral were something which resembled 44, than if it were not; and none of the modes of representing 68 (*lxxviii* or ΞH) is the least likely to have caused such a confusion with any of the modes of writing 44 (*xlii* or ΜΔ). Nor is any of the modes of representing the Eusebian interval 96 (*xviii* or ΦC) at all liable to such confusion; not to mention the fact that this interval gives a date which is itself inconsistent with the historical evidence as to the XXVIth Dynasty, without allowing anything at all for the thalassocracies of Caria, Miletus, and Egypt combined. On the other hand, either a 4 (Δ) or a 40 (Μ) might very easily fall out in favour of the 44 of Phocæa: and we shall presently see that there is a good deal to be said for a very short sea-power for Lesbos.

But how did Jerome's 68 get into the vacant place? Two conjectures

⁵⁰ *N.H.* v. 31. 39.

may perhaps be permitted. (1) Written in Latin minuscule the numeral *lxviii*, with the long flourish to the *v*, differs only by a couple of strokes from minuscule *lesbii*; and we have seen already, from the examples of Pliny and of Syncellus, how easily confusions arose from the intermixture of alphabetic and numerical groups in a document. Jerome certainly dictated his Canon; and if he found a numeral missing, hesitation and repetition of the word *Lesbii* are only too probable.

(2) Or the corruption may have arisen in the Greek text of the List itself, as follows. The Milesian numeral H (=18) followed by the Carian numeral ΞA (=61) and preceded by the lost Egyptian numeral—which I hope to show, in the sequel, to have been Ξ (=60) or ΞA (=61)—can hardly have failed to lead sooner or later to the intrusion of the combination ΞH (=68), when once the true numeral had been absorbed, as Pliny's mistake shows, into the Phocæan numeral below it. Or again, if at some stage or other of transcription the numerals were in words, the sequence $\epsilon\acute{\xi}\eta\kappa\omicron\nu\tau\alpha$ —δέκα-ὀκτώ— $\epsilon\acute{\xi}\eta\kappa\omicron\nu\tau\alpha$ -ένα is no less provocative of the blunder $\epsilon\acute{\xi}\eta\kappa\omicron\nu\tau\alpha$ -ὀκτώ.

But what of the external evidence for the duration of Lesbian sea-power? That there was such a sea-power is indicated, apart from the passage of Pliny, by several authors of late date; and though Herodotus does not mention a sea-power explicitly, he notes Lesbos, twice over, at a later date, as a state with ships to spare;⁶⁰ and he also describes, without precise note of date, a state of things in which Sigeum, which had belonged to Mytilene, was captured, after a long war, by the Athenians, and secured to them by the arbitration of Periander. There was, however, further fighting even in the days of Peisistratus' son and lieutenant, Hegesistratus. Now this participation of Peisistratus in the affair shows that Herodotus fixed the Athenian capture of Sigeum, and the arbitration of Periander not very much earlier than 570; and Athenian operations in the Troad could hardly have been possible till after the annihilation of a Lesbian sea-power, if such ever existed. On the other hand, supposing such a sea-power to have existed and to have been destroyed, as the List suggests, by the Phocæans about 578, the opportunity of its downfall was a good one for the Athenians to seize a half-way house to those new markets in Pontus which the policy of Solon had secured to them. Note also, as evidence of the view which contemporary thalassocrats and others took of Athenian enterprise in Hellespont, the troubles which befell Miltiades the elder from Lampsacus, the colony and local agency of Phocæa; and the vigorous counterstroke of Croesus of Lydia whom Herodotus depicts, as in the cases of Solon and Alcmaeon, as thoroughly phil-Athenian in policy.⁶¹

In all this we have a fifth-century version of the same set of events as in Eusebius. Periander, Alcæus, and the rest play their parts in the

* Hdt. v. 26, vi. 26-28. Note that in the fifth century also Mytilene ranked with Samos and Naxos as a contributor of actual squadrons to

the Delian League.

* Hdt. i. 29, vi. 37, 125.

struggle between Athens and Lesbos in both; but the fifth-century version pins the whole sequence down to the first half of the sixth century, and to the generation of Peisistratus and the elder Miltiades, instead of allowing it to stray up into the seventh.

On the question of the upward limit of Lesbian sea-power, indeed, Herodotus has nothing to say; for the story of Arion of Lesbos,⁶² so far as it is pertinent at all, belongs to the cycle of Periander, and gives no fresh evidence about Lesbos, except in so far as Periander, in this context, is reckoned a contemporary of Thrasybulus of Miletus, and of Alyattes of Lydia, whose period we shall have to define in § 14. There is, however, one Herodotean statement outstanding, which makes strongly for the later dates for Lesbian sea-power. Pittacus of Lesbos probably stands in the same relation to the Lesbian sea-power as Polycrates to that of Samos, and Thrasybulus to that of Miletus; and Pittacus is introduced by Herodotus⁶³ as a contemporary and adviser of Croesus. As to their relative ages, the passage tells as much, or as little, as the analogous passage about Solon; and it can hardly refer to any point within the period of Pittacus' administration of Lesbos, for he is not described as tyrant, only as τὸν Μυτιληναίων. It is, however, noteworthy that, just as Solon is the sage whom Croesus consults as to internal prosperity, it is to Pittacus that he turns for advice about his projected navy. 'Once bitten, twice shy.' If the List is correct, and it was the Phocaeans who had wrested naval supremacy from Lesbos, and were holding it all the days of Croesus, Pittacus was of all men the most proper to bid Croesus 'beware of the sea.'⁶⁴

§ 13.—*The Sea-power of the Carians.*

In place X the Excerpt has a lacuna in both columns; and Syncellus is silent. But the Armenian version of the Canon gives the *Carians*, with the numeral 61 and an interval of 59 years, from 730-671: while Jerome, reckoning backwards from the same terminal date, gives an interval of 49 years (720-671) and no numeral.

Even the smallest of these intervals (49) is too large to allow the Egyptian thalassocracy to come down lower than 637 'at latest', even ignoring Lesbos and Miletus altogether; while, allowing 4 years for Lesbos and Jerome's 18 for Miletus, it gives to Egypt the terminal date 659. Clearly there is something wrong here also: no amount of reduction of the Lesbian numeral alone will make the List conform to the conditions imposed by the known history of Egypt.

This is not the place to go into the Carian question at any length; but the summary, which follows, of the principal Greek theories about the Carians, may perhaps clear the ground somewhat.

⁶² Hdt. i. 23.

⁶³ Hdt. i. 29.

⁶⁴ The later writers incline to put the tyranny of Pittacus between 590 and 580, and

these dates suit very well the terminal date 678 'at latest,' which is indicated by the Phocaean evidence.

Herodotus⁶⁵ and Thucydides⁶⁶ agree as to a Carian sea-power, or occupation of the Aegean islands, in pre-Minoan times. Opinions differed, however, in the fifth century as to whether the Carians were originally islanders or mainlanders: the Greeks knew that they had completed the expulsion of Carians from the islands in historic times and confined them to the mainland of Caria; the latter-day Carians of Caria claimed autochthony where they actually lived, and ignored (or had forgotten) their insular expansion.⁶⁷

But two other items of Hellenic belief are clear. One is that, in spite of Minos, a Carian occupation of certain islands went on still after the Trojan War. This is best illustrated by certain passages of Diodorus;⁶⁸ but is presumed by Herodotus' statement that it was Ionians and Dorians who expelled the Carians from them finally.⁶⁹ The statement of Diodorus moreover is repeated and precise, that it was after the Trojan War and before the Hellenic colonization (and therefore immediately after the Trojan War) that the Carians exercised sea-power, and occupied, or reoccupied the islands. It is therefore surprising that the List, as given on the authority of Diodorus in the Excerpt, begins not with the Carians but with the Lydians and Maeonians.

The other Hellenic belief is that in the days of Peammetichus the 'bronze men from the sea' were conjointly Ionians and Carians. Now these Carians can hardly have been insular Carians, for the colonization of the islands by Ionians and Dorians had by this time been complete for some centuries.⁷⁰ They must therefore have been the Carians of Caria, the immediate ancestors of those more or less Hellenized Carians who figure as the allies of the Ionians in the revolts of Pactyas and Aristagoras.

How do these two items of belief affect our interpretation of the List? First, it is clear that Diodorus believed that any possible List beginning '*post bellum Troianum mare tenuerunt*' must have begun with the Carians; and that this belief is implied in the statement of Herodotus as to the colonization of the islands. Second, if we add up the numerals given in the List for places I-VII inclusive, we reach the total of 382 years; and this total if reckoned back from the earliest possible year for the beginning of an Egyptian sea-power, namely 664, only carries us back to 1046, more than a century short of the Eusebian date for the Fall of Troy (1184), and almost exactly contemporary with the foundation of Miletus and the older Ionian and Dorian

⁶⁵ Hdt. I. 171.

⁶⁶ Thuc. I. 4.

⁶⁷ For Carian autochthony compare also Diod. v. 60, Paus. 7. 2-4 *passim*, and Canon Narr. 47. Strabo 661 is explicit as to the discrepancy of current theories, and attempts to harmonize them.

⁶⁸ Especially Diod. v. 81. *μετά δὲ τῆς Τροίας ἔλασεν Κύπρον ἀρχαίοντες ἐνὶ πλείονι ἑσπεριοκρατοῦσι καὶ τὰς Κολάδων νῆσον ἀναστάσαντες τὰς μὲν ἰδίας κατέσχον κ.τ.λ.*, and the

passage about Syms (v. 53). *μετὰ δὲ τοῖς Τρωαίοις χρόνους κατέσχον τὴν νῆσον Κύπρον, καθ' ἃν χρόνον ἑσπεριοκράτοισι.* In both cases the events are earlier than the Hellenic colonization. Compare also v. 51, 54, 60.

⁶⁹ Hdt. I. 171. *μετὰ δὲ τοῖς Κύπρισι χρόνους ἑσπεριοκράτοισι πολλὰς Δωρίδας τε καὶ Ἴωνες ἐξαναστάσαντες ἐν τῇ νήσῳ, καὶ οὕτω ἐς τὴν ἑσπερίαν ἀπείκοντο.* Compare Strabo 661.

⁷⁰ See also Goodwin, *l.c.* pp. 53-4, and Diodorus, I. 66.

colonies in the islands and Asia Minor.⁷¹ It follows from this, that the List as we have it, is incomplete at the top; and on the evidence before us we can hardly doubt how the lacuna at the top is to be filled, namely by the insertion of the Carians in place O, of the diagram on p. 88.

But it is very unlikely that any one people was inserted twice over in a systematic list of this kind, unless there was some very good reason for it. Goodwin, indeed, supposed that the insertion of the Carians in place X was an attempt to make use of the mention of Ionian and Carian adventurers in the days of Psammetichus. But he argued on the assumption that the whole List was a late compilation by Diodorus or Castor; and we have already seen what reason there is to ascribe to it a much earlier and more authoritative origin. But Goodwin's suggestion is very nearly right, all the same.⁷² We have already one instance, in the List, of a sea-power, in place I, which bears a double title *Lydi qui et Maeones*. Just such a double title is used by Herodotus to describe the auxiliaries of Psammetichus; and we shall see in the next section how strong the evidence is for the belief that the ringleaders of all this Levantine adventure were the men of Miletus, the one great 'Ionian' city which was also on the sea-board of Caria. I venture therefore to suggest that the original designation for the sea-power in place IX was *Milesii et Carae*; and that the separation of the Carians from the Milesians is the work mainly of a damaged text—for it is just here that the lacuna is at its worst—; but also partly of a generation which had forgotten its Herodotus, and argued from later circumstances—the Miletus of Aristagoras, the Caria of Artemisia and Mausollus, and the general confusion of thought about the Carians,—*first*, that Miletus must have stood alone; and *second*, that room must be found in the List for the Carians independently.

We have still to deal with the Eusebian numeral 61, of which the Eusebian interval 59 is an obvious accommodation, and Jerome's interval 49 a further modification which affects all Jerome's dates from 671 back to 893 or earlier (p. 93). But we have seen already that we are here in the heart of the lacuna; we may note the probability of confusion between the Greek ΞA and the Latin XI which marks the succeeding place in the List; and we shall see presently that the historic duration of the Egyptian sea-power, reckoning from the establishment of Psammetichus in 665-4 to the defeat of Necho by Nebuchadnezzar in 605-4, gives us exactly the figure 60-61 which, if, as appears, it got separated from its context in place VIII, was available for annexation to the Carian name, when this latter broke away from place IX.

⁷¹ The fifth-century evidence for this is the genealogy of Hecataeus of Miletus, as given by Herodotus II. 143. This genealogy 'went up to a god' (i.e. human ancestry failed) in the sixteenth generation; and Hecataeus was a grown man in 500 B.C. Supposing Hecataeus to have been born in 530 at latest, and allowing three generations to a century, we arrive at 530+530=1063 as the initial year of the

sixteenth generation; and this is actually the initial year of the generation of the 'pilgrim-fathers' who colonized Miletus.

⁷² Goodwin's own solution was (l.c. p. 51) to insert the Carians between the Thracians and the Rhodians, accepting the hint of Syncellus that the latter were *κατά τὴν ῥοδὴν ἐκάρηται*. But see below p. 126, as to the significance of this variant.

§ 14.—*The Sea-power of Miletus.*

Jerome alone gives a numeral (18) to the sea-power of Miletus. He dates it from 748 to 720, giving an interval of 28 years, ten of which *may* be due to his discount of 10 years in place X. Allowing for this, as in the case of the Eretrian interval in place XVI, Jerome's Canon-reckoning accords with his numeral 18, and to this extent confirms it. The Armenian version of the Canon gives 730 as the initial year of the Carians, but no direct information about Miletus. Syncellus is silent.

We have seen already that a Milesian sea-power in the eighth century, though not in itself incredible, is rendered unlikely by the circumstance that Miletus succeeds Egypt in the List, and that an Egyptian sea-power at this period is out of the question. We have also seen that the Carian sea-power must probably disappear, as a separate item, altogether; and that the sea-power of Lesbos is to be correlated closely with the *τοπαρχίς* of Pittacus and the generation between Solon and Peisistratus. We should therefore look for the sea-power of Miletus in the opening years of the sixth century, and the closing years of the seventh.

Now Herodotus has to treat the early history of Miletus rather fully: for Miletus is the *πρόσχημα* *Ἰωνίης* in more senses than one. Its earlier wars with Lydia do not concern us here; but the great war, of which the last five years fell in the reign of Alyattes, comes just at the beginning of the period now under review. Alyattes came to the throne according to Herodotus in 617,⁷³ and according to later authority in or about 610.⁷⁴ Whatever the precise date of the formal accession of Alyattes, the war with Miletus would seem to have been over in the fifth year of his sole-reign, that is in 605; and from that time onwards, until the Ionic Revolt, Miletus enjoyed a peculiarly secure and privileged position landwards: neither Croesus nor Cyrus, as lords of Sardis, ventured to try conclusions again with the mistress of the Maeander exit.

The year 605 was a critical year in the history of the Nearer East: for it stands on the eve of Nebuchadnezzar's advance against Egypt, and of the collapse of the 'bruised reed,' even Necho. It marks therefore the point at which Alyattes, like Gyges before him, and Croesus after him, found himself face to face with a political crisis in the Levant, which directly affected his own prospects in Asia Minor. It was no time to be harrying the territory of the metropolis of Naucratis, when the only result would be to withhold from his natural ally in Egypt those 'Ionian and Carian' mercenaries on

⁷³ *i.e.* 57 years before the accession of Croesus (Hdt. I. 25), and 72 before the fall of Sardis.

⁷⁴ The divergence of the dates probably stands in direct relation to the statement of Herodotus (I. 15, 18) as to participation of Sadyattes and Alyattes in this war. Probably the war broke out in 617 or 616; Sadyattes

took the field, as King of Lydia; but left Alyattes behind in Sardis, as *ἐκτερον* and co-regent. Alyattes reckoned the years of his reign (as given by Hdt. I. 25) from this co-regency; but did not become commander-in-chief, *καταβέβαιοντες παρὰ τοῦ πατρὸς τοῦ νόταρον*, till the death of Sadyattes in 610.

whose aid the Saite dynasty was based. The year 605 therefore is in every way a probable date for the great peace between Alyattes and Miletus.

But the pretext given by Herodotus⁷⁶ for this reconciliation is quite different, and much more closely connected with our story. Here, it is the discovery that, do what he would, he could not starve out Miletus, which changed the policy of Alyattes; and this is as much as to say that then, as afterwards, Lydia was powerless against an Ionian state, if that state had command of the sea.

Now it was the tyrant Thrasybulus, not unaided by his friend and ally Periander of Corinth, who brought this conviction home; and Periander's share in the matter is emphasized a few chapters further on, in thoroughly Herodotean fashion. The familiar tale of Arion and the Dolphin is retold by Herodotus in i. 23-4; but it is Periander who is in the part of the hero. It is Periander who is repressing piracy, even among his own shipmen; and we have not to read very far between the lines to see the same Periander active, as the ally of Thrasybulus, in keeping the sea-ways open, while Miletus is pre-occupied landwards. The loyal support of the Chians, moreover, when all the rest of Ionia held jealously aloof, is further evidence of the completeness of Thrasybulus' commissariat, as well as of Miletus' influence seawards; for Chios is not only the one great Ionian city (besides Samos, the ancient rival) which was inaccessible to Alyattes and at the mercy of an Ionian sea-power; but it commands that 'inside course' between the mainland and itself, which in all ages makes just the difference on the voyage from the Hellespont southwards.⁷⁷

At the moment of the treaty with Alyattes, therefore, we can see Miletus well supported at sea, and furnished with a powerful ally in European Greece. How did Miletus turn these advantages to account, on the cessation of the landward trouble? Two other circumstances recorded by Herodotus go far to complete an outline history for the remainder of the reign of Alyattes. In v. 28, he describes Miletus at the time of the Ionic Revolt as *αὐτὴ τε ἐκείνης μάλιστα δὴ τότε ἀκμάσασα, καὶ δὴ καὶ τῆς Ἰωνίης ἦν πρόσχημα;*⁷⁸ *καθ' ἣν περθε δὲ τούτων ἐπὶ δύο γενεάς ἀνδρῶν νοσήσασα ἐς τὰ μάλιστα στάσι, μέχρι οὖν μαν Πάριοι κατήρτισαν.* Now we do not know the date of this Parian 'reconciliation,' but we do learn that the *τυραννίς* of Histiaeus and Aristagoras had been preceded by two generations—or say 60 years—of divisions and disorder. But Histiaeus was already tyrant at the time of the Scythian Expedition; not later, that is, than 510, and probably somewhat earlier. Some interval also, though not necessarily a long one, must be allowed for the

⁷⁶ Hist. i. 20-22.

⁷⁷ For an early instance see *Odyssey* iii, 170-175. It was only after 'the god showed them a sign' that they ventured across from Lesbos to Euboea *καθ' ἣν περθε* Chios instead of going 'inside.'

⁷⁸ This, it should be noted, was at the

moment when Aristagoras was planning under the protectorate of Persia to wrest from the Naxians the hegemony over the Cyclades, which since the revolution of 595 B.C. (p. 98) and the fall of Chalcis, they were no longer in a position to defend.

'Parian' constitution—a kind of 'ministry of affairs'—to fall into disorder and give place to the *tyrannis*; and before this come the two generations of *stasis*. The beginning therefore of this period of distress cannot be put much later than 575, and may be considerably earlier. But what government was it, the fall of which inaugurated the period of distress; and what changes of economic conditions or external politics brought about the fall of this government?

The régime under which Miletus became once more the *πρόσχημα* *ἰονίης* was, as we have seen, a *tyrannis*, though the foundations of material prosperity may well have been laid by the Parian reconciliation. The same was the case both in Samos and in Lesbos, at the period of their several sea-powers; and at Miletus also the great compact with Alyattes was the work of another *tyrannis*. But in Greek states the effects of a *tyrannis* were as a rule transient, not permanent,—the happier fate of Athens was the exception, not the rule,—and in the case of Miletus it is clear that after a while the strong government of Thrasybulus collapsed. We may also conjecture, in default of further information, that it was this collapse which inaugurated the two generations of discord. So important an event is clearly worth fixing if possible; and all the more so, because, if the analogy of Samos and Lesbos is worth anything, the fall of Thrasybulus should be closely connected with the fall of the Milesian sea-power, just as the first appearance of Thrasybulus coincides closely with the first symptoms of its rise. Now we have seen already that the Milesian sea-power probably began about 605; and Jerome's Canon indicates that it lasted 18 years. It should therefore have ended not earlier than 587. But we have already seen reason to believe that it ended not later than 575; and we reached this latter date only by the most rigid compression of a long and vague series of events: the phrase 'two generations' for example is quite as likely to have meant 65 or even 70 years as the 60 years which we allowed to it. But can we not fix the date of this loss of sea-power more accurately?

The other occurrence recorded by Herodotus, which concerns Miletus at all, is the war between Alyattes and Kyaxares.⁷⁵ It lasted five years, and was terminated by the 'Battle of the Eclipse' in May 585. Here at all events we have a date astronomically determined, and generally accepted as certain. This struggle also, like the siege of Miletus by Alyattes, marks the close of a period, and must be studied in its context. Nearly a generation had passed since the fall of Nineveh; and the bipartition of the Assyrian Empire had resulted in a delicate balance of power. The Media of Kyaxares and the Babylonia of Nebuchadnezzar (the *Βαβυλωνίως* of Herodotus i. 74) stood face to face, armed rivals; each hampered by a western enemy, Media by Alyattes and the Lydian hegemony τῶν ἐπὶ τὴν Ἄλυσιν, Babylon by Saite Egypt; each conscious, too, that the western enemies were united, now as ever, in concerted resistance to Oriental aggression. Wedged between each pair of antagonists lay the cockpit states, Cilicia and Judaea, each leaning on its own

⁷⁵ Hd. i. 74.

'bruised reed' for fear of the probable aggressor. Behind all, linking together the two western land-powers, and furnishing, to both, the skill and courage which made the struggle so nearly even as it was, lay, as we now can see, the Milesian sea-power; supreme, probably, on the water, between Naucratis and Sinope, and reinforced in its turn by a network of alliances: Periander's Corinth, Solon's Athens, and Sybaris and its friends in the far West: for the days of Democedes and Polycrates were not yet. The only cloud in the Milesian sky is the recent apparition of a new *τύραννος* in Mytilene.

This roughly represents the situation in the Nearer East, in and about 590. But in the next five years the scene is changed. First, some time in 591, Kyaxares found a sufficiently plausible excuse for declaring war on Lydia,⁷⁶ incidentally putting the Cilicians on his left flank *ἐν σκέπῃ τοῦ φόβου*. Next, Nebuchadnezzar seized the opportunity of his rival's preoccupation north-westward, and of some provocation from Apries, who became king of Egypt in 589,⁷⁷ to make a final end in 587 of the Egyptian outpost at Jerusalem; and in 585-4 he was once more victor over Egypt. Kyaxares had been less fortunate; the Lydian war dragged on ambiguously, and in 585 Nebuchadnezzar, who had now got all he wanted in the south-west, is found associated with the king of Cilicia in putting pressure on both Kyaxares and Alyattes to leave *their* quarrel undecided. If events went further in that quarter, Kyaxares might even win; and meanwhile the 'Battle of the Eclipse' had given both sides a scare: *τῆς μάχης τε ἐπαύσαντο, καὶ μᾶλλον τι ἔσπευσαν καὶ ἀμφοτέρω ἐρήνην ἐκιντοῖσι γενέσθαι*. The sun which really was darkened was that of Pharaoh Necho; the king of Babylon was now unhampered by anxieties south-westward; and from peace the northern powers went on to friendship and alliance. The Halys frontier was accepted as an obvious compromise; Astyages son of Kyaxares married the daughter of Alyattes, and the friendship thus inaugurated endured until the coming of Cyrus.

How did all this effect the position of Miletus? Badly at all points. The recovery of Egypt by the East, even momentarily, dealt a severe blow to Naucratis and Milesian interests generally: it also deprived of a profitable livelihood those Ionian freelances who formed the backbone of the Egyptian army. The sudden peace between Media and Lydia had the same result; in addition it set Sardis free to attend to more lucrative business than Cappadocian warfare; and this was bad for the *tertius gaudens* who had been working the route of the Maeander, and the exit of Sinope, during the war. Miletus, moreover,—if, as our List suggests, it had assumed in 604 the rôle which Egypt was forced to resign, and if, as we may probably assume (for its interests compelled), it had aided Egypt in the campaign of 585-4,—was in no good odour in Babylon, if not positively excluded from the ports of Nebuchadnezzar's sea-front. It would, moreover, have been a little sudden for a Milesian to enlist, as a Lesbian was free to do, in the service of the king of Babylon; and the king of Babylon, on his part, having attained his objects, was more probably paying off, than enrolling. It was clearly a period of

⁷⁶ Hdt. I. 74.

⁷⁷ Petrie, *Hist. Eg.* iii. 314.

sudden, and probably acute, distress; and nothing is more likely than that we should assign to this fateful year 585-4 the deposition of Thrasybulus, and the opening of the long *stasis* of Herodotus v. 28.

There is a further piece of evidence, the discovery of which we owe to Dr. Winckler, though, writing briefly, he has not, I think, developed its full significance. The statesman who rescued Lydia from Kyaxares, while annexing Jadaea and Egypt to himself, was not likely to leave out of his reckoning the third principal partner among the western powers; and it would be most instructive to find Nebuchadnezzar, in the same year 587 which saw the first move in his south-western war, taking note of an ally of Egypt 'far away in the midst of the sea.' Such a mention of an oversea ally of Egypt appears to occur in a well-known but fragmentary inscription of Nebuchadnezzar.^{78a} On the strength of a descriptive geographical term *Puthu jawa*, and of a mutilated personal name ending in *ku-u*, Dr. Winckler identifies this state with the Lesbos of Pittacus, though the context is wanting, and we have merely the probability that communications of some kind were passing between it and Babylon. But the evidence is not convincing. *Puthu jawa* is not strictly *sonst nicht bekannt* as he says; the termination *ku-u* hardly proves more than that some Greek name in *-kos* is meant; the syllables, on which Dr. Winckler relies, are not for certain parts of proper names at all; they are separated by a whole line of lacuna from the description of the country to which he assigns them; and in any case the inscription itself refers to a campaign not earlier than the 37th year of Nebuchadnezzar. Now Nebuchadnezzar's 37th year fell in 568; and this inscription consequently has no bearing whatever on the events of 587, or on any part of the political career of Pittacus.

It is however of some importance to find, *first*, that Nebuchadnezzar had his eye even later on some western sea-power which was supporting Egypt; *second*, that another inscription⁷⁹ of Nebuchadnezzar mentions again a 'far region in the midst of the sea,' as sending contributions to a temple-restoration in Babylon.

It is here, I think, that we come nearest to Pittacus of Lesbos, though not so near as Dr. Winckler would have us believe. From Nebuchadnezzar's first inscription we are led to suspect that Amasis of Egypt had Greek allies. From his second we gather that Nebuchadnezzar himself had an oversea tributary at some period or other of his reign. From Alcæus we know that about the period of the rise of Pittacus, the natural refuge of an exiled Lesbian was to enlist under the king of Babylon; and from the Thalassocracy-List we learn that Lesbos succeeded Miletus in the command of the sea. If we ever have direct evidence of tributary behaviour of Lesbos or of Pittacus

^{78a} This inscription, of which Dr. Winckler only gives a brief mention, is published in full by Dr. Pinches in *T.S.B.A.* vii. (1882), pp. 210 ff., and again by Strassmaier *Inschriften von Nabuchodonosor* (1889), p. 194, No. 329. The original is in the British Museum, and I

owe these references to the courtesy of Mr. L. W. King, of the Department of Egyptian and Assyrian Antiquities.

⁷⁹ Quoted by Dr. Winckler, *l.c.* p. 25, from *A. O. r. 4*, p. 29.

towards Nebuchadnezzar, it will only confirm what seems already probable, that Lesbian ambitious found encouragement and opportunity from Babylon and gave the last shock to the tottering sea-power of Miletus.

Now under these circumstances the following conclusions seem to be justified: *first*, that the numeral 18 for the Milesian sea-power is approximately correct; *second*, that this sea-power began shortly after Nebuchadnezzar's attack on Egypt in 604, and ended about the time of the 'Battle of the Eclipse' in 585; *third*, that the rise of the Lesbian sea-power, if it occurred as early as 586, justifies the numeral 8 which we have seen to be one of the components of the corrupt series (60) 18, 61, 68 in the List; while if it occurred as late as 584 it justifies the numeral 6, which comes thrice over in its compound *ἐξήκοντα*; *fourth*, that it is only by accepting, as in § 10, the 'latest possible' date for the fall of Phocaea, that we arrive at an interval of as many as eight years at all, and that consequently, if the fall of Phocaea should for any reason be transferred as far back as 538, there would be only 4 years to spare for Lesbos between our earliest date for the fall of Miletus and the resultant date for the rise of Phocaea; and we have already seen (p. 105) that there is some probability that 4 was the lost Lesbian numeral.

§ 15.—*The Sea-power of Egypt.* 664–604 B.C.

No numeral for the Egyptian sea-power is preserved directly at all. Syncellus and the Armenian version are silent; and Jerome gives only the dates 783 and 748, with an interval of 35 years.

We have seen already⁸¹ that Jerome's dates are out of the question; that the only period within which an Egyptian sea-power is conceivable at present begins with the establishment of Psammetichus in 664; and that only on the hypothesis that Egyptian sea-power ended soon after the defeat of Necho by Nebuchadnezzar in 605–4 can the sea-powers in places IX–XI of the List be restored to an intelligible form. We have now to collect the evidence for an Egyptian sea-power during this period, and establish so far as may be the hypothesis on which we have been working hitherto.⁸²

The account given by Herodotus⁸³ of the establishment of Psammetichus as king of Egypt states definitely, *first*, that 'Ionian and Carian' adventurers had then recently begun to harry the Delta; *second*, that Psammetichus took these adventurers into his own service, and founded a camp-town for them between Bubastis and the sea; *third*—and here Herodotus appeals to archaeological evidence still extant in his own time,—that this settlement included a naval establishment.⁸⁴ If the question be raised, of what use

⁸¹ P. 103, above.

⁸² As a matter of logical argument, this Egyptian section should have preceded §§ 12–14; but it seems more convenient to preserve the chronological order and discuss the sea-powers consecutively, while trusting to cross-references

to indicate the sequence of the reasoning.

⁸³ Hist. II. 152–154.

⁸⁴ Hist. II. 154. *ἐξ ἧν δὲ ἐκτίσθησαν χώρον (in Ananis' reign), ἐν ταύτοις δὲ αὖτε ἐκάλει τῶν αὐτῶν καὶ τὰ ἐπείτα τῶν οὐρανόθεν τὸ μέχρι ἐπεὶ ἦσαν.*

was a naval force of this kind to Psammetichus, the answer is obvious. On the one hand, not all the 'Ionian and Carian' adventurers who came to Egypt came as his vassals, any more than the first who came and harried the Delta coast; in face of an aggressive Aegean, an organized coast-guard was indispensable. On the other, the success of Assurbanipal's invasion of Egypt in 668 had been largely due to the circumstance that the land army was escorted and protected in flank by a sea-force from Phoenicia, which had apparently recently come to a settled understanding with Assyria: and if Assyria were ever to threaten Egypt again, it would be by a similar combination of forces. On this ground also, therefore, Psammetichus had urgent need of a navy. Further, as soon as Psammetichus advanced, as he shortly did, beyond his own frontier eastward, a war-fleet and oversea transport became just as essential for offensive ends as they had been during the Syrian protectorate of the XVIIIth Dynasty, when the 'King's ships' are mentioned not infrequently. Of the actual exploits of the Egyptian sea-power, however, we have no direct statement in Greek literature, seeing that they did not concern the Greek world till we come to the reign of Necho; but here we have the great circumnavigation of Africa,⁵⁵ the opening of the canal between the Nile and Red Sea,⁵⁶ wide enough, as Herodotus says, for two men-of-war to sail abreast, i.e. a good deal larger than merely mercantile needs required; and an express account of concerted expeditions, with fleets of triremes, issuing from regular arsenals,⁵⁷ and taking part in his Syrian war.

The references to Egyptian naval expeditions in Herodotus do not cease even with the death of Necho; and the invasion of Nebuchadnezzar is not even mentioned by him at all. Apries for example *ἐνανμάχησε τῷ Τυρίῳ*⁵⁸ and Amasis conquered Cyprus.⁵⁹ But by this time, as the re-foundation of Naucratis, and other symptoms show, the relations between Egypt and its Greek allies, and between Egypt and its eastern neighbours, are very different; the Syrian policy of Psammetichus and Necho is abandoned, and even for coast-defence we hear nothing of a regular navy. The evidence is of course very meagre throughout, but there is enough, I think, to support the general thesis that from the accession of Psammetichus to the defeat of Necho Egypt was a strong naval power, practically predominant in the Levant, phil-Hellenic, and anti-Phoenician to begin with, but eventually in Necho's time exercising some sort of overlordship over Phoenician seamen, as the story of the African voyage shows.

Now the interval from 664 to 604 is 60 years; and we have seen that if we can assume the numeral 60 at this point in the List we are able to explain the whole series of corruptions which occupy the lacuna between the sea-power of Phoenicia and that of Phocæa. Still better should we be able to explain them if we could date the collapse of Necho's fleet to the year 603; for this would give us *first* the numeral 61, which is the exact numeral

⁵⁵ Hdt. iv. 42. The actual navigators are here Phoenicians in the Egyptian service.

⁵⁶ Hdt. ii. 158.

⁵⁷ Hdt. ii. 159. τῶν ἐν τοῖς ὀπλοῖς ἐπιθροῶν.

⁵⁸ Hdt. ii. 161.

⁵⁹ Hdt. ii. 162.

assigned wrongly by the Canon to the Carians, and *second* the exact date 585 instead of the approximation 586 for the close of the eighteen years' sea-power of Miletus. And fortunately the details of Nebuchadnezzar's attack are still sufficiently obscure for the date 603 to be quite a possible alternative.

Dr. Winckler's theory, to which further allusion must be made in the next section, assumes that formal 'sea-power' only passed from Phoenicia to Egypt somewhere about the time of the accession of Necho in 631; but he gives no reasons at all, either for ignoring the reign of Psammetichus, or for rejecting the 35 years' interval given by Jerome, in favour of his own interval of 26 years, which neither helps to explain the dates in the lacuna, nor conforms to any external evidence. And we shall see, when we come to the sea-power of Phoenicia, which precedes that of Egypt in the List, that it is only by reckoning backwards from the year 664 that we can reach any sure equivalents for the dates which the List assigns either for Egyptian sea-power or for the sea-powers next above it.

§ 16.—*The Sea-power of Phoenicia, 709-664 B.C.*

We are now at last clear of the lacuna. The List gives 45 years to the Phoenician sea-power in place VI: the Armenian version is defective; and Syncellus is silent; but Jerome gives the same numeral 45, with the dates 836 and 783, and consequently an interval of 52 years. As similar evidence is available for the sea-power of Cyprus in place VI, and as the Armenian version becomes available, in addition, for that of Phrygia in place V, we are in a position to test the reconstruction which we have attempted by a quite different line of argument. Hellenic evidence had already begun to fail us, in dealing with Miletus and Egypt, and fails us altogether in regard to Phoenicia and Cyprus; but we have now got back into the century of the great Assyrian chronicles, and into a geographical region which comes well within their ken; and the next step in the argument is obvious. If on comparing the dates in the List with these contemporary records of the early history of the Levant, we discover no correspondence whatever between the two series of dates, things will look bad for the authenticity of the upper part of the List, in a section where the text is unquestioned. If, on the other hand, we are able to point to a series of Levantine crises, involving, or indicating, transference of sea-power from one people to another, and separated from each other by just that series of intervals which the numerals in the List assign to successive 'thalassocracies' of these same peoples, then we shall be in a very strong position for claiming real historical value for this section of the list; and a crucial verification of our hypothesis as to the Egyptian dates, and for the reconstruction of the corrupt section of the List, which we have based on it.

I have already explained that it is to Dr. Hugo Winckler of Berlin, and his recent use of the List of Thalassocracies in relation to Euphratean politics, that the appearance of the present essay is due. In discussing the

successive phases of the dealings of Assyria with Tyre, he points out that though in earlier times the Phoenicians had shown themselves not unfavourable to Assyrian ambitions, the capture of Damascus by Tiglath-pileser in 732 inaugurates a period of misunderstanding and opposition, which lasts intermittently from 732 to a little before 668, and is ended by the annexation to Assyria of the whole of Tyre's dependencies on the mainland. Tyre itself, however, retained its independence, became the firm friend of Assyria, and co-operated with Assurbumpal in his Egyptian campaign.

Why did not Tyre itself surrender, and why did Assyria desist at this point from attempts to capture it? Clearly, according to Dr. Winckler, because Tyre—like Miletus in its war with Alyattes—could count on help from some other quarter than the mainland; and because Assyria at last discovered that further violence was useless.

It is at this point that Dr. Winckler brings in the data of the List of Thalassocracies, which gives 45 years to the Phoenicians, preceded by 33 years of Cyprian sea-power, and this in turn by 25 years of Phrygian thalassocracy. He recognizes, as the counterpart of the Phrygian Midas of Greek tradition, a prince known to Sargon II. as Mita of Muski (Midas of the Moschi), who apparently succeeded to the hegemony of the Khatti in Asia Minor in the latter part of the eighth century, reasserted its ancient claim to Syria, and attacked Sargon in Little Armenia and Cilicia, but was repelled by Sargon, and accepted his overlordship in 710.

Dr. Winckler assumes that among the rights ceded by Mita to Sargon was the headship of a Mediterranean sea-league, the centre of which was an Apollo cult, somewhere out west: perhaps at Delphi, seeing that Midas of Phrygia was famous as a benefactor of that shrine.⁹⁰ He suggests, further, that the reason why certain kings of Cyprus came and did homage to Sargon about the same time as the surrender of Mita, was to secure from Sargon the title of thalassocrat, and recognition as head of this same Mediterranean league. A well-known *stèle* of Sargon himself, found at Larnaka, and now in Berlin, shows that the allegiance of Cyprus to Assyria at this time was something more than nominal; and Dr. Winckler is certainly right in regarding the year 710, or more probably 709, as a critical date in the history of Cyprus.

If, as Dr. Winckler supposes, the year 709 marks the beginning of the sea-power of Cyprus recorded in the List, the close of this sea-power and the rise of that of Phoenicia ought to fall 33 years later, that is, in 676; or if Jerome's numeral 23 is preferred, in 686. Dr. Winckler contents himself with an approximation, 680-670, and points out that it was about this period that Tyre, after suffering a five years' siege, surrendered to Assyria its mainland possessions. He thinks that, if Tyre had received no compensation for this, it must have sunk into insignificance, and that the only compensation possible was the transfer to it by the king of Assyria of the privileges

⁹⁰ HdL I. 14.

granted by Sargon to Cyprus in 709. A number of circumstances in the previous history of Phoenicia, and particularly of Tyre, seem to him to suggest that Tyre had expected such a grant, as the reward of its support of Tiglath-pileser in his Syrian War; that, disappointed then, Tyre 'would not be happy till it got it'; and that this was the cause of the long period of fractiousness which followed. Other indications, such as the asylum offered to Tyrian malcontents by some 'island' in 701, suggest that the Cyprian 'thalassocrats' had misused their privileges, and deserved to have them withdrawn by the paramount power; and there was certainly an open revolt of one king in Cyprus in 675.

Somewhere about 675, then, Dr. Winckler dates the beginning of Phoenician (i.e. Syrian) sea-power; and the numeral 45 in the List leads him to assign its close to the year 630.⁶¹ Certainly both Tyre and Sidon, and also certain kings from Cyprus, took part in Assurbanipal's Egyptian war in 668; but Dr. Winckler gives no explanation of the transfer of sea-power from Phoenicia to Egypt; and neglects altogether the complete revolution in the relations between Assyria and Egypt which took place, as we have seen, in 664. He takes, however, the same view as is proposed in § 15 above, as to the circumstances under which sea-power passed from Egypt to Miletus in or about 605. The Carians he merely omits to notice; and his treatment of the Lesbian sea-power has been briefly mentioned already in § 14.

Such in outline is Dr. Winckler's interpretation of this part of the list. Its cardinal points, as we have seen, are as follows: *first*, the hypothesis that a state counted as a 'thalassocrat' only because (and so long as) it held a titular office or licence conferred by the Great King, and was a sort of *comes litoris Saxonici* charged with the maintenance of order on the Mediterranean sea-front of an Assyrian empire; *second*, that Egypt did not acquire sea-power till somewhere about 630; *third*, that the transference to Phoenicia coincides with the surrender of Tyre's mainland possessions to Assyria somewhere about 675; *fourth*, that the embassies of Mita and the kings of Cyprus in 710, or soon after, mark the transference of this title from Phrygia to Cyprus.

With all respect to so distinguished an Orientalist as Dr. Winckler, I do not see that any one of these four points is established by his arguments. His hypothesis as to the nature of 'thalassocracy' is not implied by anything in the extant evidence: it breaks down at once when applied to the earlier part of the List, to Rhodians, Thracians, and Pelasgians; and it fails to give any explanation of the transfer from Phoenicia to Egypt. For Necho, like his father Psammetichus, was in a state of open rebellion against his formal suzerain, and it is difficult to see why the Tyrians, who were now *ex hypothesi* loyal to Assyria, should be stripped of their long-coveted dignity to decorate an impenitent usurper. The case of Egypt in fact is the clearest

⁶¹ The date which he actually gives is again an approximation 635-625. This is due to the vagueness of his dating for the submission of

Tyre, and partly also to his respect for Jerome's variant numeral 23 for Cyprus.

evidence that the epithet 'thalassocrat' was purely descriptive of the actual situation, and was applied to the ruler of the waves because he did rule them, and only so long as he continued to do so. Least of all was it dependent on the whim or the policy of a land-power somewhere in Mesopotamia. The hypothesis also explains nothing. Even supposing such a title to have existed at the Assyrian court, the Great King was most unlikely to endanger his own prestige by conferring it on anyone but the *de facto* ruler of the sea. Formal investiture, at best, only followed, and legitimized, the attainment of the substance of sea-power.

Dr. Winckler's second point, his treatment of Egyptian sea-power, has been already discussed in § 15. Its fundamental defect is that it ignores altogether the reign of Psammetichus, and assigns sea-power to Phoenicia, the vassal of Assyria, all through the period when Psammetichus was engaged (for example) in the great siege of Ashdod, which would hardly have been practicable without command of the sea. It is clear also that it is to the reign of Psammetichus that we are to ascribe the opening of Egypt to Hellenic enterprise, and the very remarkable spread of Egyptian style and manufactures among the sites and tombs of Cyprus; yet both of these movements would hardly have been possible, if the Phoenicians had dominated the Levant.

His third point, the interpretation of the Phoenician phase, is hardly more satisfactory. At best it gives only approximate dates, whereas the numerals in the list are precise. It is also not quite clear why Tyre should be less likely to be an annoyance to Assyria, if it had sea-power *de iure*; nor is continuous revolt the easiest way to obtain titular concessions from an overwhelmingly powerful suzerain. On the other hand, if we reckon back the 45 years of Phoenician sea-power from the crucial date 664, when in spite of the Phoenician contingents Egypt somehow shook itself free from Assyrian rule, and if we consequently assign to Phoenicia a sea-power *de facto* for the period indicated in the List, we perceive at once an excellent reason why Tyre was able to make itself such a troublesome neighbour to Assyria; and also why, in the last ten years of its sea-power, it changed its mind and played for Assyrian support against new competitors at sea. Most important of all, if we reckon exactly the 45 years of the List backwards from 664, we arrive at the very year 709 which is the probable date for the submission of Cyprus to Sargon.

§ 17.—*The Sea-power of Cyprus.* 742 (732)–709 B.C.

The List gives 33 years to the sea-power of Cyprus; Syncellus is silent; the Armenian version is defective; the manuscripts of Jerome give 32 or 23 for the numeral; and an interval of 28 years, from 893 to 864. Both XXIII and XXXII are easy corruptions of XXXIII, and we have had no occasion yet to question a numeral from the Excerpt; while Jerome's figures are obviously of the most haphazard kind.

There is no reason to doubt the fact of the Cyprian embassy to Sargon, on which Dr. Winckler bases the *fourth* main point of his theory; and its date seems to be most probably 709. But we do not know, from Sargon's account of it, what it came to do. The only outstanding evidence is that of the stele of Sargon from Larnaka, and the evidence which it supplies of a real submission of Cyprus about that time. On Dr. Winckler's theory this marks the beginning of the sea-power of Cyprus; but I venture to suggest that it is just as likely to signify its *close*. Phoenicia, as Dr. Winckler says, had been markedly aggressive landwards since the fall of Damascus in 732, and, from the occurrence of Phoenician names in the lists of kings from Cyprus, it is clear that it had been aggressive seawards too. Cyprus, however, was not by any means wholly Phoenician: a majority of the names of Sargon's visitors in 709 are clearly Hellenic, and in the next generation it is plain, from the scattered references which survive, that the island presented much the same spectacle of social and cultural feud as it did two centuries later at the time of the Ionic Revolt.⁹² Meanwhile, all this corner of the Levant was infested in this generation by sea-raiders, such as those who had harried Sargon's seaward flank in Cilicia during his war with Mita of Muski,⁹³ and those who had held Ashdod against him in 711. Some of these are even specifically named as *Ianna*; and they are regarded by Dr. Winckler as representatives of the Phrygian sea-power. It is, however, at least equally possible that they may have represented a sea-power with its headquarters in Cyprus; and in any case the surrender of Mita, and Sargon's pacification of Cilicia about 710, left Cyprus exposed to attack from the north as well as from the Syrian coast, whenever it should please Sargon to move. Under these circumstances, and especially if Phoenicia was preparing to recoup itself for losses on the mainland by intervention in Cyprus overseas, it may well have been good policy for the Greek kings of Cyprus⁹⁴ to make terms with the remoter enemy, and, like Gyges in the next generation, to accept an Assyrian protectorate when they found their sea-power slipping from them. Sargon was in fact already much too powerful for Tyre to attack even an overseas vassal with impunity; and his long war with Tyre in the years following 708 has all the appearance of the sequel to the Cyprian embassy in 709.

Now if the sea-power of Cyprus ended thus in 709, it should have begun, according to the List, in 742; and this is precisely the moment of the reappearance of Assyria, under Tiglath-pileser, as an aggressive power on the Syrian coast. Tiglath-pileser's war with the federated Aramaean states, between the Euphrates and the sea, lasted from 745 to 740; and ended with the submission of Arpad, Damascus, and the Phoenician states. It forms therefore just such a crisis in the affairs of the adjacent mainland as would be an opportunity for an anti-Phoenician faction in Cyprus to assert itself seawards, with the help of

⁹² *Ibid.* v. 104, 108-115.

⁹³ Winckler, *l.c.* p. 24.

⁹⁴ It should be noted however that the

deputation to Sargon included the king of Kitia, and Kitia was usually a stronghold of the Phoenician party in Cyprus.

the forerunners of those 'Iauna' who troubled Sargon and of the 'Ionians and Carians' of Psammetichus. For we may safely assume that the generation which saw the foundation of Syracuse and Naxos in the West was quite competent to interfere in the Levant, if a favourable moment should occur.⁸⁸

§ 18.—*The Sea-power of Phrygia.* 767-742 B.C.

But what had been the political position of Cyprus in the years preceding 742? Assyrian chronicles and Greek tradition are alike silent; and our only hope of information is from the archaeological record. Cultural changes, of course, though they may prove close intercourse between adjacent areas, cannot prove political conquest of the 'provincial' region by its cultural 'metropolis'; but political conquest is one of the commonest ways by which a dominant culture is propagated; and long-continued political dependence almost always leaves traces of itself in the culture of the subject-area.

Now the problem in the archaeology of Cyprus, which led me in the first instance to the study of the List of Thalassocracies, is this. After the collapse of Mycenaean or Late Minoan conditions in the Aegean, Cyprus, though it seems to have enjoyed a Mycenaean twilight longer and brighter than that of most other parts of the Levant, passes over in due course into an Early Iron Age culture in which the characteristic features are by no means wholly those which would be expected in an area so closely adjacent to Phoenicia, Palestine, and Egypt. In particular, the supersession of cylindrical and scaraboid seal-stones by a series of hemispherical, cubical, and conical forms like those of similar age in Asia Minor and North Syria, the peculiar technique of the painted pottery, and certain very marked types of iron weapons, seem to connect Cyprus much more closely with the Cilician coast and its *hinterland* than with the Syrian coast and Assyria. This phase of the culture of Cyprus is to all appearance a long one; and it is immediately succeeded by a phase of which the characteristic novelties are imitations of the later geometrical styles of

⁸⁸ If for any reason Jerome's alternative numeral 28 should become more probable, it would be necessary to assign the beginning of the sea-power of Cyprus to 732; and in this case also Assyrian history provides a striking analogy. For the year 732 is actually the year of the final fall of Damascus, the ringleader of all that Assyrian group with which Tiglath-pileser began his struggle ten years earlier; and this fall of Damascus is not only the event which was regarded at the time as the crowning achievement of the Assyrians west of the Euphrates, but also that which set Tiglath-pileser free to deal directly both with the coast towns of Phoenicia, and also with Cilicia,

Kummukh, and the frontier members of the Anatolian group of states. It consequently marks even more clearly than 742 a definite opportunity for Cyprus to separate itself from this Anatolian (or, as the Greeks called it, 'Phrygian') connexion, always supposing that it had not already done so in the former year, as indicated in the text. The year 732 is in fact the only possible alternative date to 742, and it is remarkable that Jerome's variant numeral should point so definitely towards it. In column J of the table on p. 88 I have accordingly reckoned all the dates above this point from *both* starting-points collaterally.

Rhodes and Crete, and the resumption of intercourse with Egypt, indicated by importation of amulets and scarabs of glazed ware. This latter phase can be approximately dated, by the occurrence of 'proto-Corinthian' imports, as contemporary with the first Hellenic settlements in Sicily; and these were ascribed by Greek tradition to the latter half of the eighth century, and particularly to the years between 740 and 730.

In view of this aspect of the archaeological evidence, it is certainly noteworthy to find that Cyprus is preceded in the List of Thalassocracies by the Phrygians; that the dates, so far as we can reconstruct them, assign the transference either to 742 or to 732; that the same period is signalized by the first renewal of hostilities between the new Assyria of Tiglath-pileser, and the state or confederacy or group of powers which held the Taurus frontier, and its fortress outposts in Northern Syria; and that these hostilities lead straight to the collapse and surrender of Mita of Muski, and immediately afterwards to the submission of Cyprus to Sargon. I venture therefore to propose the following reconstruction, in outline, of the last half of the eighth century, so far as Anatolia and the Levant are concerned.

(i) The Phrygian conquest of Phrygia represents a prolongation south-eastward of the Thracian and Phrygian irruption across the Hellespontine region of which we have repeated hints in Greek tradition, from Herodotus onwards; and results in the establishment, in the interior of Asia Minor, first, of a confederacy or hegemony *τῶν ἐντὸς Ἰλίου* and next, of the Cappadocia and Cilicia which the Mermuad Kings were twice prevented from annexing. Such a power, expanding eastwards during the period of Assyrian collapse in the early part of the eighth century, would find nothing to oppose its claims to the old 'Hittite' provinces south and east of Taurus, as far as Carchemish and the Euphrates. Its access to the Cilician coast, perhaps also to that of Pamphylia and the Eurymedon, would give it the same ports and the same maritime forests which later on permitted the pirate régime of the second and first centuries; and the co-operation of land-power and sea-power finds again its historic counterpart in the understanding between those pirates and Mithradates. In the north, we have already seen (p. 85, n. 12) that Greek tradition preserved the memory of a local 'thalassocracy of Sinope' in Pontus, which again finds close analogy in the Mithradatic age. In the west, the Greek legends of Midas, the preservation of his reputed offerings at Delphi, and the parallel which Herodotus evidently felt between his political position and that of Gyges, suggest that the same 'Phrygian' power extended seawards also here, and made touch with the infancy of Ionia. It is not to be expected that, in face of an Anatolian power of this kind, Cyprus, so rich in copper and timber, so defenceless strategically, and so close to Cilicia, would be able to hold out long; and we have seen how clearly its culture betrays its temporary indebtedness to the mainland.

(ii) On the other hand, no sooner did Assyria revive, from 745 onwards, and reconquer for the East the cis-Taurine districts, than the seaward parts of the 'Phrygian' régime broke loose from the rest, and formed, round their island citadel, the 'sea-power of Cyprus'; reinforced, in due course, if Sargon's ter-

minology may be pressed a little, by 'Ionian' adventurers from the west coast, who foreshadow that independent Ionia with which Gyges came into conflict so soon as Lydia too broke loose from the rest of Anatolia a generation later.⁸⁰

§ 19.—*The Upper Part of the List.*

We have seen in the preceding sections (§§ 16-18) that the numerals which are preserved by our List for places V, VI, VII offer a series of striking coincidences with actual crises in the Levant, as soon as they are dissociated from their Eusebian context, and reckoned backward from the earliest possible year for an Egyptian sea-power. Now this verification of the hypothesis with which we began not merely confirms our assumption as to the probable date and duration of that sea-power, but justifies us in accepting as probable the restoration which we have attempted of the numerals within the lacuna, in places VIII, IX, XI, and in concluding that the List, whatever its date, not merely agrees with the testimony of Herodotus, so far as that testimony extends; but goes back with accuracy into a period of history for which Greek tradition has hitherto yielded no systematic chronology of early date at all.

In the light of these considerations, it is clear that the numerals in places I-IV deserve much more respectful consideration than they have usually received hitherto; not because either Greek or Oriental records throw direct light upon them, but because, unless it can be shown that the List suddenly changes its character between place IV and place VI, the presumption is that it gives us, here also, a genuine record, in outline, of a very obscure period of history.

The dates given by the List, if its numerals be adjusted to the date 742 suggested above for the rise of the sea-power of Cyprus, are as follows:—

Sea-power of Lydians	1056-964 B.C.	Eusebius	1168-1088	Jerome	1174-1054
" " Pelasgians	964-879 B.C.	"	1088-[1004]	"	1056-1007
" " Thracians	879-800 B.C.	"	[1003-925]	"	1007-915
" " Rhodians	800-767 B.C.	"	[925]-903	"	915-893
" " Phrygians	767-742 B.C.	"	903-[—]	"	893-864

The dates given in brackets fall within a period where the Armenian version is defective; but they can be supplied, within a year, through the

⁸⁰ How far the Herodotean designation of the predecessors of Gyges as 'Heraclids' may be taken to indicate a reputed kinship with the Heraclids of European Greece, who are of the same ultimately Northern extraction as the Thracio-Phrygian intruders, is a further question; for as early as the time of Herodotus the Heraclids who is ancestor of Agron is also ancestor of Belus and Ninus, and has obviously become identified with the Oriental Heraclids.

It is worth noting, however, that Agron's date, as given by Herodotus (505 years before Gyges), when reckoned from 884, the probable date for Gyges' establishment in Sardis, brings the Heraclid conquest of Lydia into the third year of the Trojan War (1191): just a generation after the great campaign of the Phrygians on the Sangarius which Priam recalls in *Iliad* III. 184 ff.

circumstance that the sum of the numerals in places II, III, IV ($85+79+23=187$) is within two units of the difference between the initial date of place II and the terminal date of place IV ($1088 \text{ B.C.} - 903 \text{ B.C.} = 185$).

In the absence of detailed evidence there is little to say about these dates; but a few detached points should be noted.

§ 20.—*The Sea-power of Rhodes. 800-767 B.C.*

The variant, noted by Syncellus, which placed the Rhodians in place V, may have either transposed them with the Phrygians, or taken account of the lost place O which we have seen reason in § 13 to assign to the Carians. The former alternative, though it would have the advantage of grouping four states of the Thracio-Phrygian group together at the head of the list, does not seem to me probable, for the reasons already stated as to the connexion between Cyprus and the Anatolian region. The latter, on the other hand, supplies one further bit of evidence in favour of the initial Carian sea-power which we have been already led to suspect. In either event, Rhodes was well situated to play, as occasion arose during the Thracio-Phrygian domination, the same part as afterwards during the period of Galatian invasions.

The dates 800-767 fit very well the phrase of Strabo, to the effect that Rhodes had sea-power 'even for some years before the Foundation of the Olympia'; for the Olympic era would fall within the last ten years of this period.⁹⁷ The phrase 'far from their own country' refers clearly to the reputed colonies of Massilia,⁹⁸ Parthenope, Elpis,⁹⁹ Sybaris, and the Balearic Islands;¹⁰⁰ and the words *ἐπὶ σωτηρίᾳ τῶν ἀνθρώπων* acquire a new meaning, in the present state of our knowledge of the disturbed condition both of the Aegean and of Western Asia Minor during the period of the Thracio-Phrygian irruption. For such a movement must be regarded as supplying much the same stimulus to emigration from the Asiatic coasts, as the 'Dorian Invasion' had supplied in the case of European Greece.

§ 21.—*The Sea-power of the Thracians. 879-800 B.C.*

Herodotus knows of a great migration of Teucrians and Mysians into Europe in prehistoric times, and also of the Thracian origin of the Phrygians of Asia, but he gives no date for either. The later writers give much detail as to the Thracian raids on both sides of the Aegean, reaching as far as the

⁹⁷ Strabo, 654. *ιστοροῦσθαι δὲ καὶ ταῦτα περὶ τῶν Ῥωδίων, ὅτι οὐ μόνον ἀπ' οὗ χρόνου ἀναβάντας τῆς οὖν πόλεως εὐτόχους αὐτὰ ἐβάλετο, ἀλλὰ καὶ πρὸ τῆς Ὀλυμπιακῆς θίξεως συχναίς ἔτατον ἔταλον πόρρον τῆς οἰκίας ἐπὶ σωτηρίᾳ τῶν ἀνθρώπων.* With this revised chronology,

Goodwin's reference (l.c. p. 24) of the 'Oa. θίξις' to the year 884 becomes unnecessary.

⁹⁸ Strabo, l.c.

⁹⁹ Steph. *Byz.* s.vv.

¹⁰⁰ Diodorus, v. 53, 54.

Maeander,¹⁰¹ Naxos,¹⁰² Attica,¹⁰³ Boeotia,¹⁰⁴ Phocis.¹⁰⁵ The mention of Naxos is particularly instructive, as it shows that, like the Pelasgians before them (in Lemnos and Imbros), they were not confined to the mainland. Diodorus' statement that these Thracians held Naxos for 200 years does not affect the authority of the numeral 79 in the List: for it is much easier to get into an island than to get out again.

Some of these Thracian raids are given in a context which connects them with the 'Coming of the Heracleidae,' i.e. about 1080; but on the Asiatic side the Thracian invasion of Bebrycia (i.e. Bithynia), which is an event known to Herodotus, is associated by Jerome with the dates for the Thracian 'sea-power.' But the most graphic description, and also the most probable perspective for this whole phase of irruption is that of Orosius.¹⁰⁶ *Horum praeterea temporum medio interiacent exsilia naufragique Graecorum*; and then he goes on:—*fatorum ignari Thracas, nova in bella surgentes, et generalis tunc per totam Asiam Graeciamque commotio.*

§ 22.—*The Sea-power of the Pelasgians. 964-879 B.C.*

I do not propose in this context to enter on an examination of the mass of traditions about the Pelasgians; only to point out that whereas in Homer¹⁰⁷ Lemnos is still in the power of the descendants of its Argonautic conquerors, Greek tradition is unanimous in regarding its occupants as in some specific sense 'Pelasgians' from the dawn of Greek history down to the Athenian conquest of the island in the sixth century.¹⁰⁸ It follows from this that the Pelasgic conquest is post-Trojan,¹⁰⁹ and in all probability also post-Homeric.

On the other hand, Herodotus seems to assign the expulsion of the Argonautic or Minyan lords of Lemnos to the generation of the 'Coming of the Dorians'; and the description of Pelasgians in Crete, along with Dorians, in the *Odyssey*,¹¹⁰ would seem to throw back the date of such 'Pelasgian' sea-power as was requisite to reach the South Aegean, at least into Homeric time, if not as far back as the generation of the Trojan War. Indications such as these, coupled with the geographical hints supplied by the Trojan Catalogue as to the habitat of the Pelasgian allies of Priam, suggest that the conception of this people which underlies the inclusion of their name in our List at this point¹¹¹ is that of a specific and well-localized people, of

¹⁰¹ Diodorus, i. 50.

¹⁰² Strabo, 321.

¹⁰³ Strabo, 401. Note that this is partly a 'Pelasgian' island.

¹⁰⁴ Timaeus, ii. 29.

¹⁰⁵ Strabo, 410, 423.

¹⁰⁶ i. 18.

¹⁰⁷ *Iliad* vii. 467 ff.

¹⁰⁸ *Hist.* v. 26, vi. 136 ff.

¹⁰⁹ Compare the tradition which comes to us

through Diodorus, ix. 53. 7, of a Pelasgian raid on Boeotia while the Boeotian army was away in the Troad with Agamemnon.

¹¹⁰ *Odyssey* xix. 177.

¹¹¹ I hope before long to find occasion to discuss at greater length the results of an enquiry into the historical development of the Greek conception of 'Pelasgians' as presented to us in the texts of successive periods.

Thrace-Phrygian antecedents, settled in the time of the Trojan War in South-eastern Thrace, but expanding (or extruded) thence into the Hellenistic regions and the islands of the North Aegean, and as far as Crete and Attica in Homeric and immediately post-Homeric time. Thus, if 'Homeric time' may be interpreted, in the fifth-century sense, as a period ending about 950, this conception of a Pelasgian sea-power lasting from 984 to 879 would fit very closely. We have therefore, here, if not an indication of the historic truth of the List, at all events an additional proof of its conformity to fifth-century tradition, and of its independence of the main current of speculation on this subject, in the fourth century and later.

§ 23.—*The Sea-power of the Lydians (Maeonians).* 1056-964 B.C.

Here the List, and the Armenian Version, give a duration of 92 years: Syncellus is silent; the Armenian Version allows an interval of only 80 years (1168-1088 B.C.); and Jerome an interval of 118 years (1174-1056 B.C.).

External evidence almost fails us; but our revised date, 1056 B.C., for the beginning of a Lydian or Maeonian sea-power is supported, as against either of the Eusebian dates (which are more than a century earlier), by the consideration already noted in discussing the true position of the Carians in the List, that this date falls in the early part of the generation to which belonged the founders of Miletus and other principal cities of Ionia; and that these foundations, in their turn, were regarded in antiquity as marking the close of the Carian domination over the islands. Of the relations which existed between these new foundations and contemporary Lydia, we know nothing directly. But we may fairly infer that they stood, to begin with, in much the same relation as the 'Ionian and Carian' adventures of a later age maintained with Saïte Egypt: and in that case a loosely organized coalition of sea-rovers hostile to the Carians, and banded together under the hegemony of a king of Sardis, may very well have passed for a 'sea-power of Lydia.'

Any theory of a Lydian sea-power ought clearly to take account of the Herodotean story of the Lydian origin of the Etruscans.¹¹² Herodotus gives no precise date, but puts the whole episode back into the period before the coming of the Lydian Heraclids; and this, as we shall see presently, involves a date not later on his reckoning than 1217, and apparently much earlier. Other fifth-century authorities adopted a similar¹¹³ estimate, and dated the Tyrrhenian arrival in Italy eighty years before the Trojan War (=1274-1264). Thucydides, however,¹¹⁴ brings the period of tumult in Italy much lower, placing the expulsion of the Sikels from Italy into Sicily, which is one of its later phases, as low as 1030 ('about 300 years before the Greeks came to Sicily'). This would fall within the period of the Pelasgian sea-power, on Jerome's reckoning, and would agree with the data in Herodotus as to the Pelasgian occupation of Lemnos, which so many later writers describe as

¹¹² Herodotus, I. 94.

Hat. I. 28.

¹¹³ Philistus and Hellanicus: see Dionys. ¹¹⁴ cf. 2.

Tyrrhenian. For Hellanicus, meanwhile, all this sequence of events seems to have been prior to the coming of the Tyrrhenians into Italy; and, consequently, not later than about 1280, if Hellanicus was consistent in his dating. Clearly therefore there were in the fifth century two distinct theories about the Tyrrhenians in Italy. One, represented by the statements of Herodotus, Hellanicus, and Philistus, placed their arrival in Italy considerably earlier than the Trojan War, and connected it with the series of movements which we know as the Great Sea Raid of Merenptah; the other, represented by Thucydides, regarded its sequel as still in progress as late as 1030, or about the period of the Pelasgian sea-power: and it is curious to note here that Hellanicus, though he indicated the earlier *date*, seems to have adopted a Thessalian and Pelasgian, not a Lydian, *origin* for the Aegean emigrants. He has in fact adopted the date of the one version, and the content of the other.

Were there then two views current in antiquity as to the date of the Lydian sea-power also? I think there probably were. On the one hand we have the statement of our List, assigning this sea-power to a post-Trojan date, 1056-964; and to this we must add the curious statement of Eusebius that Sardis was captured by the Cimmerians 'for the first time' in 1078. On Jerome's dating of the Lydian sea-power, 1174-1056, this event falls right in the middle of it; but on the dating in the Armenian version, 1168-1088, it falls ten years after its close; and if, as we have already seen to be probable, one of the elements which go to make up the discrepancy between the earlier dates in the two Eusebian Lists is the interval of ten years which is apparent in places IV and IX, it is not improbable that the true Eusebian dates for the Lydian sea-power may be ten years later; and, if so, its close will fall not in 1088 but in 1078, the very year of the Cimmerian raid. Here therefore we seem to have an indication of the actual event which cost the Lydians their sea-power; and an indication of the quarter from which their successors the Pelasgians were imminent, which is entirely in accord with the evidence of Homer and Herodotus as to the earlier seats of that people.

There is, on the other hand, more than one piece of evidence which suggests that a Lydian sea-power of some kind was believed to have existed considerably earlier. Stephanus¹¹⁵ quotes Xanthus the Lydian for the statement that Ascalon in Palestine was founded by Ascalus, son of Hymenaeus, and brother of Tantalus, and ascribes the initiative of this colonization to a Lydian king Aciamus. Athenaeus¹¹⁶ also quotes, from the same Xanthus, a story that Derketo, who plays a considerable part in the early mythology of Western Asia Minor,¹¹⁷ was drowned in the lake of Ascalon by the Lydian

¹¹⁵ s.v. Ἀσκάδωρ.

¹¹⁶ E. 37, p. 240 D.

¹¹⁷ See Stark, *Gaza* (Jena, 1852), pp. 41 ff., and Nicolai of Damascus, fr. 24-26 (Müller, *F.H.G.* III, pp. 271-2), to E.M., s.v. *Κέρκυρα* Derketo marries the river-god Kayster. The two stories

together look almost like a Levantine counterpart of an Aethiopian legend; and in view of the current probability of a very early Cretan (or at any rate South Aegean) settlement on this coast, one should perhaps compare also the Cretan legends of Britomartis.

Mopsus or Moxus. The former of these legends would date the foundation of Ascalon about three generations before the Trojan War, or about 1300; for Tantalus is father of Pelops, and great-grandfather of Agamemnon; and this interval, reckoned back from the date 1194-1184 would bring the foundation of Ascalon right into the middle of the great Sea-Raids of Ramessid time (1319-1268). The latter legend brings Ascalon into connexion with the very obscure cycle of Mopsus-legends, which cluster mainly round certain early Aegean colonies in Cilicia, and round the generations of the Argonautic Expedition and the Trojan War.¹¹⁸ Now this period of sea-raiding in its turn just covers the period from the great Sea-Raid of Merenptah's time to that of Ramesses III., which falls immediately before the date of the Trojan War.¹¹⁹

Another corollary follows from a comparison of the Herodotean evidence. The Trojan War fell, according to Eusebius, between 1194 and 1184; but according to Herodotus¹²⁰ at least 800 years before his own time; not later than about 1230, and possibly a decade or two earlier. This is not the place to discuss this important date in detail; but we should perhaps note, as bearing on the chronological limits for a Lydian sea-power, that the Herodotean date for the establishment of the Heracleids in Lydia (505 years before Gyges) works out, when calculated from the Herodotean date for the accession of Gyges (712 B.C.) so as to fall in the year 1217 B.C. Herodotus therefore clearly regarded the coming of the Heracleids in Lydia as a crisis not earlier than the Trojan War, and apparently, on his own chronology, nearly a generation later.

Now it is not likely that a Lydian sea-power would survive a crisis of this kind, involving a change of masters, without grave peril; and we are probably justified in regarding the date 1217 as one which must fall quite outside the limits of this sea-power, either above or below. Herodotus' sketch of the Tyrrhenian emigration suggests, as we have seen, that he regards the coming of the Heracleids to Lydia as a subsequent event, and the Lydo-Tyrrhenian emigration as pre-Trojan; and we are left therefore without any fifth-century evidence for such a theory of Lydian sea-power as our list suggests except the phrase of Thucydides already quoted, which points somewhat in the direction of a date not long before 1030.

§ 24.—*The Pre-Lydian Sea-power. 1184-1036 B.C.*

Even the Eusebian dates (1168 and 1174) do not carry up the Lydian sea-power to the Eusebian date for the Fall of Troy, in 1184; and in pro-

¹¹⁸ See references in Stark, *Geogr.* p. 43, n.7.

¹¹⁹ Bochart, commenting on this passage (*Phaleg* (ed. 1651), p. 98) notes that the Lydians acquired *maris imperium Cretensibus ereptum*, but gives no authority for the statement beyond a reference to the Eusebian *Chronicon*.

In his version of the Eusebian Canon, however, under the year of Abraham 1841, he read *Post Caras mare obtinuerunt Lydi*, which, if it

was a genuine variant for *Lebdi* would look like a reminiscence of the top of our List in the un-damptated form which I propose to restore. But here too Bochart gives no authority; and the contemporary confusion of the Scriptural *Lubin* and *Ludim* makes it only too likely to have been a recent emendation or a blunder. Compare for example Bochart's own index, x.7.

¹²⁰ ii. 145.

portion as we bring down the Lydian dates, this hiatus expands. We have seen, however, already in § 13, that Greek tradition, at least as far back as the fifth century, assigned a *Carian*, not a Lydian sea-power, to the period which immediately succeeds the Trojan War; and we have stated there the case for inferring that the List, in the form in which it has come down, is imperfect at the top, and should be completed by prefixing this Carian sea-power in 'place O.'

§ 25.—*Conclusion.*

All these earlier 'sea-powers,' however, add very little either to our understanding of the List, or to our knowledge of the period of history to which they must be referred. The essential point is the support which they give to the general view of these centuries as a time of violent aggression on the part of new peoples in the North-Eastern half of the Aegean, from Thrace to Caria; and to the interpretation which they permit, *first* of the sea-raids, in the Egyptian record, as an earlier phase of the same movement, and *second*, of Ascalon and the other Philistine settlements in South Syria, as one of its more permanent results.

My main object, however, is gained, if I have established the conclusion, *first*, that the lower part of the Thalassocracy List, as we have it now, corresponds in general,—and never positively conflicts— with the data of our only large fifth-century authority for early Greece, Herodotus: *second*, that its data as to the sequence of Cyprus, Phoenicia, and Egypt may be taken as literally exact; *third*, that the allusion to the Carians in Diodorus v. 84 supplies the clue to the original heading of the List, and also to the corrupt numerals which intervene between Phoenicia and Lacedaemon; and *fourth*, that, as the upshot of the whole enquiry, the Thalassocracy List is a mutilated but genuine document of approximately Periclean date, and embodies data which can be shown to be historically accurate far back into the latter half of the eighth century B.C.

JOHN L. MYRES.

THE ORIGIN OF THE TYRANNIS.

Introduction.

It is a commonplace that the age of the early tyrants was an age of extraordinary commercial development. The invention of coinage, the most important invention in the history of commerce, dates from that age. In what personal relationship did the tyrants stand to this commercial development? They are often assumed to have been merely one of its passive products.¹ Is it not possible that the founder of the tyranny was the man who turned to greatest advantage for political purposes the unique commercial conditions of the age in which he lived? Thucydides² connects the rise of tyrannies with money making. Does not the saying *χρηματὶ ἀνίπ.* which dates from this time, suggest that the tyrants were the leading members of this new class of nouveaux riches, and that they owed their political supremacy to their previous commercial predominance? The indications are of course exceedingly slight. Only in two cases, those of Samos and Athens, where the tyranny arose unusually late, is there any solid material for our investigation. It will be best to consider in detail these two cases only, merely indicating in the barest outline how the seventh century legends and traditions may be severally brought into immediate connexion with the commercial theory.

Samos.

The Samians had from early times been great sailors³ and shipbuilders,⁴ their ships being engaged mainly in the carrying trade.⁵ From early times too they had enjoyed a great reputation as workers in metal, especially the fine metals,⁶ and they were no less famous for their woollen manufactures.⁷

¹ For the generally received view concerning the genesis of the tyrants see Beloch, *G. G.* i. 312, 318; Plaut, *Die Tyrannis*, i. 120, 121; Guizot, *La main-d'œuvre industrielle dans l'antiquité* (Paris, 1875), 29; Radet, *La Lydie*, ch. iv. ² i. 12.

³ Hdt. ii. 178; iii. 47, 48, 59; v. 59; *EB. Nag. Samos*; *ib.* 'Ἡρώων Τεχνῶν'; Athen. vi. 267 a; Plut. *De Mal. Hdt.* 22; *Q. Gr.* liv.

⁴ Thuc. i. 18; Pliny vii. ch. 57.

⁵ Hdt. iv. 152.

⁶ Collignon, *La sculpture grecque*, i. p. 151. The Samian voyage to Tarshish (626 B.C., Macan, Hdt. i. 5, 8, l. p. 196) gives the latest date for the beginning of this industry; Apul. *Florid.* ii. 15.

⁷ Timoc. xv. 125.

The island was not, however, exclusively commercial. There was a powerful landed aristocracy called γεωμόροι,⁸ who doubtless owned the rich Samian oliveyards.⁹ The power of the γεωμόροι explains the late date of the tyranny in Samos.

When at last the tyranny was established by Polycrates, the tyrant is found controlling the commercial activities of his state. All through his reign Polycrates was a great sailor and ship-owner.¹⁰ He built the famous περί λιμένα χῶμα,¹¹ and was even credited with the invention of a new type of boat, called the Σαμαίνη.¹² The general conception of the Samian tyrant is indeed that he used his ships in naval and piratical operations rather than for any peaceful purpose. Thucydides¹³ says of him ναυτικῶ ἰσχύον, ἄλλας τε τῶν νήσων ἐπηκόους ἐποίησατο καὶ Ῥήνεια ἐλὼν ἀνέθηκε τῷ Ἀπόλλωνι τῷ Δηλίῳ. But even the capture of Rheneia, which Thucydides seems to regard as the principal warlike achievement of Polycrates' fleet, was one that may have had most important commercial consequences. By capturing Rheneia Polycrates became practically master of Delos. He celebrated the Delian games.¹⁴ Considering the unrivalled situation of Delos, it is not unlikely that the festival was even in the sixth century the ἐμπορικὸν πρᾶγμα¹⁵ that it was in later ages.¹⁶ The tyrant's war with Sparta was in all probability a commercial struggle started by Corinth.¹⁷ Systematic piracy again was probably Polycrates' only way of maintaining the unequal struggle with Persia. In any case Polycrates employed his fleet for commercial purposes as well as warlike. He traded with Egypt,¹⁸ which was the one Eastern country that was during most of his reign independent of Persia and open therefore to Samian trade. The statement of Clynus the Aristotelian Πολυκράτης τὸν Σαμίον τύραννον ὑπὸ τρυφῆς τὰ πανταχόθεν συνάγειν¹⁹ shows that Polycrates had a personal interest in the transport trade of the people who μέγιστα δὴ Ἑλλήνων ἐκ φορτίων ἐκέρδησαν μετὰ γε Σάστρατον Αἰγινήτην.²⁰ There is unfortunately nothing to show that he employed his own vessels in φορτηγία.

⁸ Pint. *Q. Gr.* 37.

⁹ *Apul. Florid.* ii. 12; *Aesch. Pers.* 883.

¹⁰ *Thuc.* i. 13; *Hdt.* iii. 39; cf. also *Euseb. Chron.* Armenian version, mare obtinuerunt Sami, just after the notice of Polycrates becoming tyrant. Latin version Dicerarchiam Sami considerunt, just after the notice of Polycrates' accession.

¹¹ *Hdt.* iii. 60.

¹² *Pesych. Σαμαίνης τρώας*; *Phot. Σαμαίνης*; *Pint. Pericles* xxvi.; *Athen.* xii. 540a.

¹³ i. 13.

¹⁴ *Phot.* and *Suid.*, Πόθια καὶ Δήλια· φασὶ Πολυκράτη τὸν Σάμου τύραννον, Πόθια καὶ Δήλια τεύχεσθαι ἕως ἐς Δήλια πλεῖναι εἰς θεὰ χρησόμενον κ.τ.λ. τῆς δὲ Πόθιας ἀνελὼν ταῦτά σοι

καὶ Πόθια καὶ Δήλια· βουλευμένη θεοῦν ἐστὶ ἰσχυρὰ μετ' ὀλίγον γὰρ χρόνον αὐτὸν ἀπολλέσθαι συνέβη.

¹⁵ *Str.* x. 486.

¹⁶ Is it conceivable that the repeated purifications of Delos in the sixth and fifth centuries may not only have had a religious significance, but may also have meant the repeated restriction of a commercial element that was constantly reasserting itself?

¹⁷ *Hdt.* iii. 47 and 48, where observe the causes to which Herodotus attributes the war.

¹⁸ Cf. *Hdt.* iii. 39 with *Diod.* i. 95 and 98.

¹⁹ *Ath.* 540 c.

²⁰ *Hdt.* iv. 152.

It is difficult again with the evidence at our disposal completely to identify the tyrant with Samian industry. There is no direct evidence that Polycrates was engaged in the metal industry during his reign,²¹ but he seems to have patronised and developed the Samian manufacture of woollen goods. Among the things which Athenaeus (540 c, quoting Clytus, cf. supra) declares that Polycrates when tyrant introduced into Samos are *ἐκ Μιλήτου πρόβατα*.²²

Polycrates the tyrant has therefore been shown to have taken some part in the commercial and industrial activities of the city that he ruled.²³ There is strong evidence that he was engaged in the leading branches of Samian industry before he became tyrant, and that his political power was the direct result of these activities. Athenaeus, in the passage above quoted, still speaking of Polycrates, says *πρὸ δὲ τοῦ τυραννῆσαι κατασκευασάμενος στρώμας πολυτελεῖς καὶ ποτήρια ἐπέτρεπε χρῆσθαι τοῖς ἢ γάμον ἢ μείζονας ὑποδοχὰς ποιουμένοις*. It could scarcely be more definitely stated that Polycrates owed his throne to his wealth in *στρώμα* and *ποτήρια*. The *στρώμα* are surely the manufactured article for which he introduced the Milesian and Attic *πρόβατα*. The word is apparently technical. Theocritus uses another form of it (*ἐστρώται*) in the passage where he refers to the famous wools of Miletus and Samos.²⁴

²¹ Note however that he was the patron of Theodorus, who was famous not only as a jeweller but also as a maker of metal vases (Hdt. i. 51; Ath. xii. 514f). It will be shown immediately that Polycrates owed his throne to the *κατασκευὴ* of *ποτήρια*. The *ποτήρια* were almost certainly of metal. *ποτήρια κεραμεύα* are only once mentioned in the passages quoted by Liddell and Scott (Ath. 404a), whereas there are numerous passages in which *ποτήρια* are specifically stated to be of metal (*χάλκεα* Hdt. ii. 37; *ἀργυρὰ, χρυσά* C.I. 138 7, 19, 27 et alibi. Hdt. iii. 148). The fact of their being *τέτα* for *μειζότερα ἐπετελέα* is most decisive of all. It may well be the case therefore that Theodorus was something more to Polycrates than merely his crown jeweller and silversmith. Some ancient authorities held that Theodorus flourished 150 years before Polycrates; Plin. N.H. xxix. 45 (152). Theodorus is always associated with Rhocus, and the two names may have been borne in alternate generations by one family of artists. This would not require the Rhoci to have flourished longer in Samos than the Wedgwoods have in Staffordshire. Whether or no this explanation holds, the divergence in dates points to the industry having flourished for a long time in the island. If our date for Theodorus be insisted on, that of Herodotus (i. 51), which makes the artist the elder contemporary of

Polycrates, must of course be chosen (see Fraser, Paus. iv. p. 237).

²² Hdt. 540 d (from Alexis) *πρόβατα ἐκ Μιλήτου καὶ τῆς Ἀττικῆς*. Cf. also Hdt. iv. 164, Polycrates' support of Arcesilaus, the banished tyrant of Cyrene, in *ἀπολοτρόφος* *Λιβύῃ* (Hdt. iv. 155, cf. the oracle in iv. 156 where reference is made to Cyrenian fleeces).

²³ One reported act of Polycrates seems quite out of keeping with his character as a great merchant. He is said to have debased the coinage (Hdt. iii. 56). But Herodotus mentions this report only to reject it as *ματαιώτερον*. In any case it was only a desperate expedient for getting rid of an invader.

²⁴ It seems probable that Polycrates' brother and partner at first in the tyranny was also originally a merchant or manufacturer of woollen goods. At any rate after his banishment we find Darius wanting to buy a *χλαῖνις* from him. According to Herodotus (iii. 189) it was the one that Syloson was at the moment wearing. The incident took place in Egypt. Syloson was one of the Greeks who had followed Cambyses there. Some of these had come *κατ' ἐμπορίαν*, *οἷον στρατευόμενοι*, *οἷον* as mere sightseers. Syloson, who *ἔγχετο* *ἐν τῷ Μέρει* at the moment of Darius' request, replied *ἐγὼ ταῦτα πωλεῖν πλεονεκτήσας χλαῖνας* *ἔδωκα* *ἡ δὲ δαλὰν*. The incident suggests that Syloson was in Memphis *κατ' ἐμπορίαν* as a merchant in

Polycrates probably had a connexion, direct or indirect, with Samian shipping before his accession, for the Samian silversmiths got their silver from Spain.²⁵ There is however no evidence that Polycrates procured his silver in his own ships.

The two references in Athenaeus, the one to Polycrates' importations as tyrant, the other to his bribes *πρὸ τοῦ τυραννῆσαι*, though from the same passage, are not from the same source. The first is explicitly from Κλύτος ὁ Ἀριστοτελικός. The second is presumably from Alexis, who has been definitely quoted as the authority for the previous sentence. Even if Athenaeus is no longer quoting Alexis, there is not the least reason for thinking that he is quoting Clytus again.

In his domestic policy Polycrates won great fame as the promoter of great public works. The sums that he spent and the number of hands that he employed on the *ἔργα Πολυκράτεια* must have been very large.²⁶ He maintained his power by means of mercenaries, native, it should be noticed, as well as foreign.²⁷ These mercenaries were undoubtedly a development of the *πεντεκαίδεκα ὀπλίται*²⁸ with which he had seized supreme power.

It is natural to ask at this point how far the labour employed by seventh and sixth century capitalists was free labour. Free labour must of course have been employed to a different extent in different occupations, and the question must be decided in detail for the different industries with which the tyrant will be found connected. In Samos, after the fall of the tyranny, a large number of slaves purchased the citizenship.²⁹ This might seem a reason for assuming that Polycrates had relied on highly trained servile labour, which the city had not known how to deal with after the fall of the tyranny. There is however a simpler explanation. Syloson, when restored by Persia, had almost annihilated the free population.³⁰ As regards shipping in particular the evidence points to the general use of free labour. Thucydides³¹ states that the *ἐρέται* of the Corinthian fleet of 433 B.C., when slaves were much easier to procure than in the sixth century, were nevertheless free men working for pay. Polycrates' *τεχνίται* were free men engaged *ἐπὶ μισθοῖς μεγίστοις*.³²

Speaking generally, free labour was much more employed in *χειροτέχνια* in the seventh and sixth than in the succeeding centuries.³³ Büchsenchutz³⁴ in a most instructive passage points out that in early times the *τέχναι* were

χλαυίδες. The unromantic commercial aspect of the transaction between Syloson and Darius, which is already obscured in Herodotus' account, has quite disappeared in that of Strabo (xiv. 638), who makes no mention of Darius' offer to purchase.

²⁵ Hdt. iv. 152.

²⁶ *Ar. Pol.* viii. 11, p. 1313 b; *Athen.* 540 D.

²⁷ Hdt. iii. 39 and 45.

²⁸ Hdt. iii. 120.

²⁹ Suidas, *Συρίων* δ *ἔθνος*.

³⁰ Strabo, xiv. 638 *ἵσταντο* *Συλοσῶντος ἐμπορίας*; Phot. and Suid. *loc. cit.* *οὐδένος τῶν πολιτευομένων*.

³¹ I. 31 *μισθὸν παίθοντες*.

³² *Ath.* 540 D; cf. Hdt. iii. 131.

³³ Hdt. ii. 167 *μεμπέτατοι δ' ὅν τοῦτο* (contempt of *χειροτέχναι*) *πάντες οἱ Ἕλληνες*.

³⁴ *Recht und Ethik*, S. 821.

in the hands of freemen,³⁵ but each man was his own master, there being no factories or division of labour. In classical times there was considerable division of labour, and there were businesses employing a large number of hands,³⁶ but citizens took small part in them.³⁷ The age of the tyrants was therefore the age in Greek history when apart from all details of evidence there is the greatest a priori possibility of an individual having secured the political power which falls naturally to the employer of organised free labour on a large scale. The employment of servile labour in commercial enterprises was the result, not the cause, of the commercial expansion and development of the seventh and sixth centuries.

Athens.

The chief early industry of Athens was pottery:³⁸ the large finds of Dipylon ware show that from an early time Attic pottery had a character of its own.³⁹ But Athens was not exclusively commercial like Corinth and Aegina. Her large territory made her, like Samos, partly agricultural. To this fact may be due her failure⁴⁰ to compete commercially with Aegina and Corinth in the seventh century. Hence too, as in Samos, the late rise of the tyranny. There was of course the attempt of Cylon, but Cylon failed because, though wealthy (*ἀλυμπιοῦν*) and influential (*δυνατός*), he could not possibly, in the Athens of his day, be the leader of any dominant organised commercial activity. He was merely a progressive member of the aristocracy (*τῶν πάλαι εὐγενῶν*) connected with the great band of merchant princes only by marriage.⁴¹ The attempt and its result are both what might have been expected from the position of Athens at the time. Athens never became the ideal home for a tyranny. Soon after Cylon's attempt she did indeed begin to supplant Corinth in the pottery trade,⁴² and the influence of the rich city merchants and exporters must have greatly increased, but Solon's measures for encouraging the growth of olives and the exportation of olive-oil belong also to this period,⁴³ and the importance of the *εὐγενεῖς* who owned the oliveyards must have increased almost equally. No merchant therefore attempted to secure all the labour of the town and seize the tyranny. The country aristocracy employed labour too. Tyranny was almost impossible.⁴⁴ But

³⁵ Hes. *Op.* 300 *ἔργον οἰδὲν δοῦναι* and Homer, *μῆνιν*; cf. Plut. *Sol.* xiii. *πρὸς τὰς τέχνας ἐστρεφε τὸν πολίτην*.

³⁶ Demosth. *κατ' Ἀπόδον*, p. 816; Lysias, xii. 19; Xen. *de Fed.* i. 14 (Sicias' mining works).

³⁷ Ar. *Fol.* iv. 9, 1323, *οἷον βάσανον βίον οὐτ' ἀγοραίων δὲ ἤντ' τὸν πολίτην*.

³⁸ Pliny, vii. 57 (Delphin, p. 1325), Figlinas Cerechus inuenit Atheniensis.

³⁹ Perrot, vii. p. 100.

⁴⁰ Hdt. v. 82-83.

⁴¹ Thuc. i. 126.

⁴² R.M. *Paseo*, vol. II introduction p. 2.

⁴³ Plut. *Sol.* 24.

⁴⁴ Another proof that Athens was at this time too backward commercially to have been overcome by the wealth of a would-be despot and to have established a tyranny, yielding to gain' (Thuc.) is that the first Athenian colony was not founded till between 569 and 555, during the first reign of Peisistratus, Bosolt, i. 2, 316; *Ann.* 3.

though the wealth and power of the land-owning aristocracy prevented any Athenian merchant from making himself tyrant, the commercial development of Athens must have made it daily more difficult for the Athenian aristocracy to exclude the rich merchants from political power. Hence the leading man at Athens at this time was not a mere millionaire, as in Corinth and the other more exclusively trading states. Solon had indeed some experience of trade,⁴⁵ but he was essentially a politician with a gift for finance, not a financier with political ambitions. He became not a tyrant but a lawgiver.

Solon tried to provide for the difficulties which he saw resulting from the existence of two evenly-matched parties, the landowners of the plain and the traders of the shore. The tyranny arose from the formation of a new interest, that of the *Διάκριοι*, by Peisistratus.⁴⁶ Of the means by which Peisistratus gained the throne less is known than is often imagined. The ruse by which he secured his club-bearers and the Acropolis is a detail. Peisistratus was careful to observe the Solonian constitution, especially before his third restoration. It is therefore not to be expected that the means that he took originally to secure his power would have been patent to everybody. But after his second restoration he threw off the mask more. *ἐρριζωσε τὴν τυραννίδα ἐπικουροῖσι τε πολλοῖσι καὶ χρημάτων συνόδοισι, τῶν μὲν αὐτόθεν, τῶν δὲ ἀπὸ Στρυμόνος ποταμοῦ συνόντων.*⁴⁷ So Aristotle.⁴⁸ *παρήλθεν εἰς τοὺς περὶ Πάργαιον τόπους, ὅθεν χρηματισάμενος καὶ στρατιώτας μισθωσάμενος, ἐλθὼν εἰς Ἑρετρίαν ἐνδεκάτῃ πάλιν ἔτει τὸ πρῶτον ἀνασώσασθαι βίᾳ τὴν ἀρχὴν ἐπεχείρει. . . κατέχει ἤδη τὴν τυραννίδα βεβαίως.* That is to say, Peisistratus used money gained in business (*χρηματισμός*) to compass his second restoration. The question arises, did Peisistratus use similar means, only less openly, to secure his original *ἀρχή*? in other words, was Peisistratus a merchant and financier before he became tyrant? What evidence there is leads to the conclusion that he was.

Peisistratus became tyrant originally as leader of the *Διάκριοι*.⁴⁹ Now M. Guiraud in his interesting but sober account of *La main-d'œuvre dans l'ancienne Grèce* (pp. 30, 31), sees from the words of Herodotus *χρημάτων τῶν μὲν αὐτόθεν κ.τ.λ.* that Peisistratus worked the mines at Laureium. Can the *Διάκριοι* be the mining population of Attica, almost exclusively in the employment of the great mine owner Peisistratus, who carried on operations in Thrace as well as Attica, and was in close commercial connexion with the famous mining industries of Euboea?⁵⁰

⁴⁵ Plut. Sol. 2.

⁴⁶ Hdt. I. 69 *ἀνασώσας αὐτὸν Παράλιον καὶ τῶν ἐν τοῖς Πέλοις, ὅστις εἶναι στάσις.*

⁴⁷ Hdt. I. 61.

⁴⁸ *Resp. Ath.* 15 of Peisistratus' second banishment.

⁴⁹ Ar. *Eup. Ath.* 12, 14.

⁵⁰ Cf. Alenens fr. *Χαλκιδικὰ περὶ βίης*; Aesch.

fr. *Εὐβοϊκὰ* (Hesiod; Strabo, x. 447 § 9 and name Chalkid. Hesychius says that there were *Διάκριοι* in Euboea as well as in Attica. *Διάκριοι* is a literal translation of Bergleute, the German for miners. The mining population of South Wales is always spoken of in Cardiff as the people up (in) the hills.

There are two arguments against this conjecture.

(1) The *Διάκριοι* were a political faction, i.e. citizens. Could citizens work in mines?

(2) The *Διακρία* was a district. The orthodox view places this district away from the mines.

(1) In classical times the mines were worked almost entirely by slaves.⁵¹ Only very occasionally poor citizens worked their own allotments.⁵² There is not a single instance of a citizen working in a mine for wages.⁵³ This does not however prove that citizens did not work for wages in the mines in Peisistratus' time, when, as has been pointed out in dealing with Samos, the conditions of labour were unlike anything seen in Greek history before or after. In fact the words of Solon⁵⁴ show that it was quite usual for citizens to work in mines with their own hands, though whether for pay or on their own account is not stated.⁵⁵ Plutarch describes the *Διάκριοι* as *θητικὸς ὄχλος*. From this fact Caer⁵⁶ reasonably conjectures that they were *μισθωτοί* (Lohnarbeiter).

(2) It is generally assumed that the triple division of Attic territory into *πεδῖον*, *πάραλος*, and *διακρία* is definite and absolute, and that it is for instance out of the question that coast land north of Brauron was ever called *πάραλος*, or mountain land south of Brauron *διακρία*. The evidence for the triple division is in fact of the weakest possible. It consists of a passage in Thucydides⁵⁷ which suggests that the tongue of Attica running out into the Aegean was called par excellence the coast land, and one from Hesychius, which by a clever but not certain emendation is made to tell us that *ἡ Διακρία* stretched from Parnes to Brauron.⁵⁸ Now it was very natural that the name Mountain should be given to the part of Attica where there were most mountains, and the name coast land to that which had in fact a larger proportion of coast to Hinterland than any other portion of Attica. But in regard to the evidence of Thucydides,⁵⁹ we cannot assume that the Peloponnesians ravaged the whole of the apex of the triangle. They may well have marched down one coast and up the other. In fact this is just what Thucydides in the very next sentence says they did, *καὶ πρῶτον μὲν ἔτεμον αὐτήν ἢ πρὸς Πελοπόννησον ὁρᾷ, ἔπειτα δὲ τὴν πρὸς Εὐβοίαν τε καὶ Ἄνδρον τετραμμένην*. In regard again to Hesychius' evidence, it would only be valid for the purpose of the argument if his definitions were mutually exclusive. As a matter of fact he never mentions *τὸ πεδῖον* at all, and describes *ἡ παραλία* as *ἡ Ἀττική, ἐνθεν καὶ ἡ ναῦς πάραλος*. Can it be claimed, in view of the fact that Strabo

⁵¹ Hyp. fr. 33 Blass; Xen. *de Pax.* 4. 14 and 15 and *passim*; Thuc. vii. 27.

⁵² Dem. xiii. § 20.

⁵³ Ardaillon, *Les Mines de Laurium*, p. 91.

⁵⁴ Bergk 12 (1). 49, 50.

⁵⁵ Pythos of Phrygia is reported to have used citizen labour in his mines a generation after Polycrates (Plut. *de Mul. Virt.* li. 362).

⁵⁶ *Paroimia in Megara u. Athen*, p. 85.

⁵⁷ Thucydides does indeed speak of τῆς

πάραλος γῆς καλουμένης, which suggests that the word *πάραλος* is conventional. But by this expression Thucydides surely only means that this was the Attic word for the Attic coast. His own word for the Peloponnesian shore in the very next sentence is *τὰ ἰσθμολέοντα*.

⁵⁸ *Διακρία*—*χώρα ἢ ἀπὸ Πάρνης εἰς Βαυράνας* (editors *ἐκτὸς Βραυράνας*).

⁵⁹ li. 55.

uses the word *παραλός* of all the coast as distinguished from the Hinterland—mentioning *ἡ παραλία ἡ κατὰ Σαλαμίνα* and the *παραλία* from Sunium to Oropus—and that an inscription of about 320 B.C. (*I.G.* ii. 1059) mentions *παραλία* as part of the land of the *δῆμος Πειραιεύς*—that the evidence for the conventional view is sufficient!

It is far more probable that mountainous country, wherever it occurred in sufficient bulk to distinguish it in character from that of the sea-faring population, would be included under the name *διακρία*, and that sailors, even if they did happen to live north of Brauron, sympathised with the views of the 'shore.' Doubtless it would be difficult in some cases to determine where the line should be drawn, but it is against all reason to include in the sea-faring population the miners who inhabited the mountainous Hinterland of the apex of the Attic triangle. It is worth remarking that the mines which Peisistratus worked were not those nearest the sea, but were well inland at Maronea, a place where the ground varies from 170 m. to 370 m. in height (*Bursian Gr. Geogr.* i. 254).⁶⁰ If once it be admitted that the mining population of the *γουνὸς Σουνιακὸς* formed part of the *Διακρίοι*, it can hardly be disputed that they must have been politically more important than the scattered inhabitants of the Northern Uplands.

When once established Peisistratus took care to control the labour of the city by legislation.⁶¹ There is no mention of his having regulated the coinage, but his son Hippias, who appears to have followed closely in his father's steps, declared the coinage out of currency, called in all the coins at a reduced price and then *ἐξέδωκε τὸ αὐτὸ ἀργύριον*.⁶² Numismatists are agreed that what Hippias did was to issue not the same coins again, but the same silver recoined with a more refined type. Hippias doubtless made some immediate profits himself from this recall and re-issue of the coinage, but he may well have had the design of improving the reputation abroad of the Athenian mintage. Beloch (i. 329) well insists upon the acute commercial instinct of Peisistratus in getting a footing on the coast of the Hellespont by seizing

⁶⁰ The Attic *μέταλλα* first appear in history in 484 B.C. (*Hdt.* vii. 144; *Plut. Them.* iv; *Ar. Eop.* *Ath.* 22), when τὰ μέταλλα γὰρ ἐν Μαρωνείᾳ ἔφθον. But this does not show that they had not previously influenced Attic history. They had certainly been worked ages earlier. 'La disposition des gisements' (at Maronea), says Ardaillon (*Les Mines de Laurion* pp. 132, 133), 'est telle que les plus riches ne sont pas ceux qui pouvaient être atteints les premiers.' A technical explanation of the veins follows. 'Il fallut donc des siècles de recherche et d'efforts' [*cf. Xen. de Vect.* iv. 2, οὐδὲν οὐδὲν πειρατὰ λέγειν ἐκὸς τοῖαν χρόνον ἐπεχειρήθη (τὰ ἀργύρεα)] pour en soupçonner l'existence et en atteindre le niveau' (i.e. of the rich vein 'discovered' in 484). Athens was tempted to work the somewhat poor upper veins in the sixth century by the great demand

for silver caused by the introduction of a silver coinage. The poorness of the veins which Peisistratus worked is confirmed by the fact that to root his tyranny firmly he had to start fresh workings in Thrace. For Thracian silver mines see Strabo 2. 331 fr. 34 and αὐτὸ τὸ Πάγγαιον ὅπου χρυσεῖα καὶ ἀργύρεα ἔχει μέταλλα (*cf. Xen. Ath.* 15 sup.) and *Hdt.* v. 17 near lake Prasias on the Strymon (*cf. Hdt.* i. 64 sup.).

⁶¹ *Plut. Sol.* 31 τὸν δὲ τῆς ἀρχῆς νόμον εἰς Σόλων ἔθεντο ἀλλὰ Πεισιστρατος. *cf. Perander, Nic. Dam.* fr. 58 (*Bon.* i. l. 648 *Ann.* 2), ἐκάλει τοὺς πολίτας δούλους πῶσθαι καὶ σφράγιζε ἑαυτὸν, εἰς τοὺς αὐτοὺς ἔργα ἐκείρισθαι. *Her. Pont.* fr. 5. Wiltsch *Die Altgriechische Thonindustrie*, p. 15.

⁶² *Aristot. Oecon.* ii. 4.

Sigeum.⁶³ His unsuccessful rival Miltiades had already established a *τυραννίς* on the opposite coast. It is important for our purpose to emphasise the fact that the policies of the several tyrant dynasties were from first to last coherent in themselves and analogous to one another. Hippias not only kept his hold on Sigeum to the last and eventually retired thither, but actively developed his father's line of policy by forming a close personal connexion with the tyrant of Lampsacus,⁶⁴ and effecting a reconciliation with the Philaids on the European side of the strait.⁶⁵ That his reformation of the coinage was intended to further his foreign and colonial commercial policy is made the more probable by extant coins, some found in the Thracian Chersonese with the Hippias Athena type on one side and the Milesian lion on the other,⁶⁶ others with the same Athena head, and on the reverse the type of Lampsacus. Lermann⁶⁷ argues that the Thracian coins must have been struck when the Chersonese was independent of Athens, because when dependent it would not have been allowed to strike coins. But though this may be true, the use of the Athena type points to some close connexion with the mother city. The analogy of the coins of the Corinthian colonies makes this practically certain, and the Lampsacus coins are a parallel still more to the point. Lampsacus could only have used the Hippias Athena consciously as an ally of the Athenian tyrant. It is therefore to be inferred that Hippias' monetary reforms were not a mere isolated speculation, but part of the broad and widely extending commercial policy on which his power was based. In carrying out these schemes Hippias was but following in the path of his father, who had himself laid the foundations of them, and who probably owed his position to the fact that he was enabled, through his large mining interests, to take the lead in the commercial development which Solon had inaugurated with his financial reforms.

It is more than a coincidence that as the Peisistratids secured their ἀρχή by a mixture of commercial enterprise and political intrigue, so it was by a mixture of political intrigue and commercial enterprise that they were driven out, through the Alcmaeonidae undertaking the contract for rebuilding the temple at Delphi.

The Seventh Century Tyrannies.

Lydia.—Gyges, the first ruler to be called tyrant,⁶⁸ was famous for his wealth.⁶⁹ He possessed gold mines,⁷⁰ and was probably the first to coin in Lydia. Can the legend⁷¹ of the magic gold ring point to a tradition that Gyges possessed gold mines before his accession and owed his throne to

⁶³ Hdt. v. 91 ἀπαρῶναι δὲ ἀβραῦ (Παρίστειται δὲ Λυγίαι) κατέσχευε τὸ παρὸν εἶναι ναῖδα ἑωρῶν πόλιν. Cf. Periander and Corcyra.

⁶⁴ Thuc. vi. 59.

⁶⁵ Hdt. vi. 39.

⁶⁶ Cardia and Limnae in the Thracian Chersonese were Milesian colonies (Str. xiv. 635, vii. 381, fr. 52).

⁶⁷ *Athenstypen*, pp. 20-21.

⁶⁸ *F.H.G.* iii. p. 72 fr. 1; *Et. Mag.* τὸ παρὸν.

⁶⁹ Archil. Burgk, 19 (2); Str. xiii. 626, xiv. 680.

⁷⁰ Cf. Str. xiii. l. 22 and 23 with Babel, *La Lydie*, pp. 372-3.

⁷¹ *Pl. Rep.* ii. 359 b.

them! For the financial basis of the power of even the later Mermnadae cf. Nic. Dam. ed. Tauchn. p. 270 (based on Xanthus of Lydia, see *Bus.* i. 2. 451-2).

Miletus.—We only know that the tyranny was preceded by a struggle between two parties called Ploutis and Cheiromache,⁷² names which sound remarkably like capital and labour. The accession of Histiaeus, the later tyrant, seems to have synchronised with a revival of the commercial prosperity of Miletus.⁷³ Histiaeus showed great eagerness to secure a commercial settlement in Thrace, which was regarded by his enemies as the proposed basis of a new political power.⁷⁴ ὁ βασιλεὺς, κοῖον τι χρήμα ἐποίησας, ἀνδρὶ Ἑλληνι δεινῶ τε καὶ σοφῶ δοὺς . . . πόλιν; . . . ἵνα . . . ἔστι μέταλλα ἀργύρεα, ὁμιλός τε πολλὸς περιοικέει.

Ephesus.—Radet⁷⁵ makes out a good case for believing that the Ephesian tyrants shared with the Mermnadae the monopoly of the great trade route that ran through Sardis to Ephesus. It is impossible positively to prove or disprove that the basis of the power of the Ephesian tyrants was commercial, but it appears to have been at any rate financial, cf. Suid. Πυθαγόρας—τῷ δῆμῳ καὶ τῷ πληθύνῃ ἦν τε καὶ ἐδόκει κεχαρισμένος, ἅμα τὰ μὲν αὐτοὺς ὑπελπίζων ὑποσχέσασιν, τὰ δὲ ὑποσπείρων αὐτοῖς ὀλίγα κέρδη.⁷⁶

Argos.—It was surely Pheidon's invention of μέτρα for the Peloponnesians rather than his ὕβρις or impiety that caused him to be regarded as a different kind of ruler from his forefathers, as a τύραννος instead of a βασιλεὺς.

Corinth.—Corinth had long been a great emporium,⁷⁷ but a great commercial development took place about 700 B.C. in (1) pottery⁷⁸ and (2) ship building and trade by sea.⁷⁹ The activity of the Cypselids in this new marine commerce is beyond dispute. Wilisch⁸⁰ attributes to the Cypselids the development of the Corinthian export trade in pottery. Cypselus was a metio⁸¹ and therefore probably originally a trader.⁸²

Megara.—Theagenes⁸³ secured his power τῶν εὐπόρων τὰ κτήνη ἀποσφάξας. The preservation of this statement becomes more comprehensible if Theagenes' coup was a simple but effective way of securing the monopoly of the famous Megarean woollen industry.⁸⁴

Conclusion.

The commercial origin of the tyrant's power seems fairly certain in the case of Samos and very probable in that of Athens. In the case of the

⁷² Plut. *Q. Gr.* 32.

⁷³ *Hdt.* v. 28.

⁷⁴ *Id.* v. 28.

⁷⁵ *La Lydie*, pp. 134 and 148.

⁷⁶ Cf. *Sol.* 2 (13) = χρήματα πειθέμενοι; Theogn. 823 κέρδους εἶκος.

⁷⁷ Thuc. i. 13; Str. vii. 378.

⁷⁸ Wilisch, *Die Ailkerischische Thonindustrie*, p. 151.

⁷⁹ Thuc. i. 13, τῶν Ἑλλήνων τὸ πᾶσι κατά γῆν

ἐμπορεύεσθαι, and the account of Ameinoteles' invention in the same chapter.

⁸⁰ *Op. cit.* p. 151.

⁸¹ From Gomara, *Paus.* v. 13. 7.

⁸² Can the story of the infant Cypselus being concealed in a kypselos mean that the future tyrant spent his earlier days in the obscurity of a pottery?

⁸³ *Ar. Pol.* viii. 1305a.

⁸⁴ Xen. *Mem.* ii. 7. 8; *Bus. G. G.* i. 1. 371.

seventh century tyrannies it is more conjectural, but the legends that have been preserved about the early careers of Gyges, Phaedon, Cypselus, and Theagenes give some support to the conjecture. Further, the careers of the seventh century tyrants bear such a remarkable resemblance to those of Polycrates and Peisistratus, that it is reasonable to infer that the origin of the tyrannies was the same in both centuries, especially as it has been shown that Athens and Samos became predominantly commercial somewhat later than Corinth, Megara, and the other cities where tyrants arose in the seventh century. Neither the accumulation of probabilities nor the argument from analogy is quite convincing in itself, but each gives additional weight to the other. If once the commercial origin of the tyrant's power is admitted, the various facts recorded about the tyrants certainly gain in meaning and coherence. The mercenaries, the monetary innovations and reforms, the public works and labour legislation and the foreign alliances which are so repeatedly found associated with the early tyrants and which give the preserved accounts of them such a distinct stamp, become far more significant if the tyrant's power was based on his control of the labour and trade of his city. It is scarcely conceivable under any other theory, that there should not have been at least occasional cases of commercial retrogression or stagnation under the *τυραννίς*. The fact that the commercial theory gives the most coherent explanation of the policy of the typical early tyrant is again no proof that the theory is true, but it is a further perfectly sound reason for accepting it on a less amount of direct evidence than would otherwise be required.

But perhaps the best test of the truth of any theory upon the origin of the early tyrannis is the evidence afforded by contemporary literature, especially the political poems of Solon and Theognis. Has the commercial theory the support of this contemporary evidence?

The political aim of Theognis was to prevent a recurrence of tyranny in Megara. What does the poet bid his townsmen beware of? Not of eloquence, not of violence, not of rashly appointing a *νομοθέτης* or *αἰσχυμήτης*. All his warnings are directed against wealth. The whole town of Megara had become commercial.⁸⁵ Birth had lost its prestige,⁸⁶ and wealth acquired unprecedented power.⁸⁷

It was the wealth of the would-be tyrant that Solon too feared.⁸⁸

Solon and Theognis wrote with the examples of Gyges, Phaedon, Orthagoras, Cypselus, and Theagenes before them.⁸⁹ If they constantly feared that some *πλούσιος φορτηγός*⁹⁰ would make himself tyrant, it must surely have

⁸⁵ 117, 449, 499, 1105, 1164 g.h. (money); 576, 619, 671 f., 691, 858, 1202 (shipping), and note the large number of similes and metaphors in the oligarchic Theognis drawn from money and shipping.

⁸⁶ 679, 318, 523-4, 683.

⁸⁷ 621, 679, 699, 1137.

⁸⁸ 4. 3 and 2. 5 (Bergk); cf. Theog. 44 f., 823.

⁸⁹ Is it possible to see in Solon 12, 22-22 a reference to the fates of the various tyrant families of the seventh century?

⁹⁰ Theog. 679.

been because the tyrants of the seventh century had sprung from the new class of *πλούσιοι φορτηγοί*. If the poems of Solon and Theognis are carefully read through, they will, I think, be found throughout to dwell specially upon the danger of the *πλούσιος* making himself tyrant by means of his *πλοῦτος*.

PERCY URE

University College, Cardiff.

THE TOPOGRAPHY OF PELION AND MAGNESIA.

THIS paper gives the results of a journey of exploration undertaken in April, 1905, in the Magnesian peninsula by Mr. A. W. Van Buren of the American School at Rome and myself. The observations are in many cases incomplete, but every effort has been made to make them as perfect as time and means allowed. I would like to point out to archaeologists who are too often content only with a tour to Larissa, Tempe, the Metéora, and Pharsala, that Thessaly is in many respects a *terra incognita*. That it amply repays exploration and excavation is shewn by the results obtained by Dr. Tsountas and Dr. Stais at Dhimini, Sesklo, and Marmariani. It is to be hoped that in future archaeologists will visit Thessaly more frequently and not be content with mere sight-seeing. I myself hope to return this year to study the Ossa district; and it is possible that the British School at Athens will, if circumstances permit, excavate the temple site at Kato Georgi.

In preparing this paper I have received much kind help from Dr. Wilhelm, Dr. Friedrich, Dr. Svoronos, Mr. G. F. Hill, and Mr. Wroth. To these and to Mr. Van Buren I wish to express my hearty thanks. I am also much indebted to two local gentlemen Θεόδωρος Ζηργάνος¹ and Χαρίλαος Γαϊρέφης of Argelasta who accompanied me for two days, to the Demarch of Neochori, and many others.

§ 1.—Introduction.

The principal modern authorities who have dealt with the topography and archaeology of the district are:—

Leake, *Northern Greece*, iv. pp. 368–399, 420–433 [Leake].²

Mézières, *Mémoire sur le Pelion et l'Ossa* (*Archives des Missions Scientifiques*, 1854, pp. 149 *seqq.*) [Mézières].

Bursian, *Geographie von Griechenland*, i. pp. 96 *seqq.* [Bursian].

¹ He published in the *Παθησαυτικὴ* of April 21st and 22nd (May 3rd and 4th), 1905, a brief account of part of our journey.

² In the square brackets are given the names by which the works will be cited below. Other works of less importance are, Kretschmann,

Rerum Magnesium Specimen; *Tower, Highlands of Turkey II*; *Usinger, Griechische Reisen und Studien*. For an account of the Magnesian Confederation see *Daruberg-Saglio*, v. pp. 837 *seqq.*

Spalathra, promunturium Acontium, oppida Meliboea, Rhizos, Erymnæ, ostium Penii, oppida Homolium, Orthæ, Iressiæ, Pelinna, Thaumaciæ, Gyrtion, Crannon, Acharne, Dotion, Melite, Phylacæ, Potniæ.

Other important information is given us by Strabo, Ptolemy, and Pomponius Mela. The towns or places which previous writers have assigned to the Magnesian peninsula are Sepias, Aphetae,² Olizon, Spalathra, *Kopaxai*, Methone, Neleia,³ Demetrias, Iolcus, Orminion, Pagasæ, Glaphyræ,⁴ Boebe, Myræ. Of all these sites not one is actually identified by epigraphical evidence. The position of Demetrias is certain, since Strabo tells us it was built between Pagasæ and Neleia. The site of Pagasæ is fixed because Strabo also says it was in his day the port of Pherae. Therefore Pagasæ must be identified with the ruined city to the west of the harbour of Volo. On the east of this same harbour in a very strong natural position is another city site: this must be Demetrias. Thus we must assume Neleia to have been to the south of Demetrias. Iolcus we know from Strabo was only seven stades from Demetrias; therefore it must be looked for quite close to that city. Scylax in enumerating the towns within the Gulf of Pagasæ heads his list with Iolcus, and then mentions four or five more sites. Similarly in his list of those outside the gulf he begins with Meliboea, which we know from Livy⁵ to have lain at the foot of Ossa between it and Pelion. Therefore we may follow Georgiades in placing it in the neighbourhood of Thanatu,⁶ which identification has been confirmed by epigraphic evidence.¹⁰ Thus it is legitimate to assume that Scylax' list of towns begins with the most northern. In this paper then it is proposed to take the towns in the reverse order from south to north, and to identify them as far as possible with the ancient sites of the peninsula. A brief description of each site is given with additional notes on any features of interest in its neighbourhood.

§ 2.—*Sepias*¹¹ and *Aphetae*.¹²

This town was situated on or near a promontory which bore the same name. Hitherto it has been universally assumed that Cape Sepias is the promontory at the heel of Magnesia opposite Skiathos. Our most important authority for its position is Herodotus. In describing the movements of the Persian fleet before Artemisium, he says three of the Persian scouts advanced to the sunken rock between Skiathos and Magnesia. This rock,

² Herodotus, vii. 193.

³ Strabo, ix. 436.

⁴ *Itac.* ii. 712; Stephanus, s.v.

⁵ xlv. 18.

⁶ P. 144.

¹⁰ *Δελφία*, 1889, p. 92; Inscri. at Thanatu: *Παριεῖσαν Μενάβρον Μελιβόεον*.

¹¹ Herodotus, vii. 113, 188, 191; Strabo, vii. 330, ix. 443; Pausanias, viii. 27. 14;

Athenaeus, i. 80 D; *Itin.* loc. cit.; Apollonius Rhodius, i. 580; Ptolemy, iii. 18, § 18; Pomponius Mela, ii. 3. 580; Georgiades, p. 137; Bursian, p. 100; Mézières, p. 219.

¹² Herodotus, vii. 193, viii. 8; Strabo, ix. 436; Apollonius Rhodius, i. 591; Stephanus, s.v.; Leake, p. 243; Bursian, p. 101; Georgiades, p. 114.

then called Myrmex and now Eleutheri, lies just awash in the channel between the heel of Magnesia and Skiathos, rather nearer the mainland than the island. He then says the whole fleet made one day's voyage from Therma to the coast between Casthanæa and Cape Sepias. Casthanæa is identified with great probability with a site by Keramidi¹² on the northern coast below Pelion. Later in describing the storm he says that some Persian ships were wrecked at Hipnoi at the foot of Pelion (a place identified by Georgiades with the cave-eaten cliffs by Veneto), others at Cape Sepias, others near Melibœa and Casthanæa. A glance at the map shews all these places near together except Sepias, if we identify it with the heel of Magnesia. Finally Herodotus, in describing the last movement of the fleet before Artemisium, says the Persians rounded the extreme point of Magnesia and sailed straight into the bay leading to Pagasæ. There they anchored at a place called Aphetae, said to take its name from the abandonment of Heracles by the Argonauts. Georgiades identifies Aphetae with Aphesos, a little modern village right inside the Gulf of Pagasæ. This view is clearly absurd. If the Persians could enter the Gulf of Pagasæ they would have passed the Greeks at Artemisium and have outflanked Leonidas at Thermopylae. Besides it would make nonsense of Herodotus' statement that Aphetae and Artemisium were opposite one another. Leake places Aphetae at Trikeri at the mouth of the gulf, a very unsuitable place and open to the same strategic objections. Grundy,¹³ who seems to accept the orthodox view as to the position of Sepias, says that Aphetae must have been somewhere in the south of Magnesia at the entrance to the Gulf of Pagasæ. Now in the south of the Magnesian peninsula there are only two harbours, one at Plataniâ not far round the corner of the peninsula, and another by the Palaeokastro identified as Olizon. The latter cannot be Aphetae, since at Aphetae there was no town. The one remaining site is Plataniâ, which is directly opposite Artemisium and is to-day marked as a harbour on the Admiralty chart. Further there is a place near Plataniâ still called 'Αφῆρτες. Plataniâ bay is quite sheltered from the north-east, so that when the second gale arose the Persian fleet would be quite safe. Herodotus' words *ἰθαίαν ἐπλεον ἐς τὸν κόλπον τὸν ἐπὶ Παγασέων φέροντα* must not be taken too literally. He may mean the gulf that leads to the Gulf of Pagasæ; or may easily have regarded the channel north of Eubœa and the Gulf of Pagasæ as one. As regards Sepias it will easily be seen that it cannot have been at the heel of Magnesia opposite Skiathos. Otherwise it is hard to understand why the Persians did not put to sea and run round the corner, between Eubœa and Magnesia, where they would have been safe from the Hellespontias, obviously a north-easter.¹⁴ Also Apollonius Rhodius, although his geography is not very accurate, would hardly say *ἔδυνε δὲ Σηπιάς ἄκρη, φαίνεται δ' εἰναλίη Σκιάθος*, if Sepias was directly opposite Skiathos. Therefore Sepias must be near Casthanæa, and must be identified with the very prominent cape below Pelion, now called Por-

¹² Georgiades, p. 142.

¹³ *Great Persian War*, pp. 323 seqq.

¹⁴ The Greeks for instance ran from Artemisium towards Chalkis during the storm.

This is much more of a cape than the rounded corner at Kato Georgi opposite Skiathos. Another point in favour of placing Sepias at Pori is that north of Kato Georgi as far at least as Zagora there is no beach at all to accommodate a fleet. The coast is very rocky and most inhospitable. The transference of Sepias from Kato Georgi to Pori leaves us without a name for the site at the former place.

It also necessitates some consideration of the topography of the eastern side of Ossa against the sea. As I am not qualified to speak of this district from personal experience, I will briefly summarize the possibilities in a table. The places mentioned are arranged from North to South.

<i>Hellenic Sites.</i>	<i>Georgiades' Identifications.¹⁶</i>	<i>Scylax' Order. Possible Identifications.</i>
Kokkino Reuma.	Karynnaia. ¹⁷	(Thaumakia.) ¹⁸
Tarsana.	Rhizus.	Meliboea.
Thanaia.	Meliboea.	Rhizus.
Skiti.	Thaumakia. ¹⁹	Karynnaia. ¹⁷
Keramidi.	Kasthanassa. ²⁰	(Kasthanassa.) ¹⁹
Veneto.	Hipnoi. ²¹	(Hipnoi.) ¹⁸
Pori.	Myrae.	(Sepias.) ¹⁹
Kato Georgi.	Sepias. ¹⁸	Myrae.

The towns given in brackets in the third column are those known of from other sources. Meliboea and Rhizus must have been important towns, since they both struck coins.²² The proposed identifications are only possible if Scylax' order be really from north to south. We can only know from the authors already quoted that Meliboea and Kasthanassa lay near where it is proposed to place them: definite epigraphical evidence only can settle the points finally.

Near the village of Pori there are, according to Georgiades,²³ at a place called 'Καλύβι τοῦ παραγιάτου,' Byzantine mingled with Hellenic ruins. The spot is close to the cape, and is therefore from the reasons given above to be identified with Sepias, which we know from Strabo²⁴ stood near the cape of the same name. For the site at Kato Georgi the name Myrae has been suggested. Inscriptions give us the name of two other Magnesians towns whose whereabouts is entirely unknown, Ale²⁵ and Aiolo.²⁶ These might almost equally well be given to this site. Here there are some interesting remains. On the top of a steep, isolated hill, which has been half eaten away by the sea, there are plentiful remains of Byzantine buildings. Amongst the

¹⁶ Pp. 134 seqq.

¹⁷ Strabo, iv. 443 ('Εσσυται), Pliny, *loc. cit.*; Apollonius Rhod. i. 597; Valerius Fl. II. 14. Coins, *Hand. Hellenic Num.* p. 250.

¹⁸ *Iliad*, ii. 716; Strabo, ix. 438; Stephana, *s.v.*; Pliny, *loc. cit.*

¹⁹ Herodotus, *loc. cit.*

²⁰ *Head, op. cit.* p. 256; *Wroth, Num. Chron.*

1900, p. 9, Pl. I. 7.

²¹ P. 128.

²² *ix.* 430.

²³ *Att. Mus.* 1882, pp. 69 seqq. = Dittenberger, *Syll.* 799; *Att. Mus.* 1890, pp. 283 seqq. No. 27.

²⁴ *Att. Mus.* 1882, pp. 69 seqq. = Dittenberger, *Syll.* 799.

ruins grow some stunted wild olives; all incline towards the south-west and shew the prevalence of north-east winds in this region. I was told that 'walls without mortar' had fallen in the sea. Careful search down the side of the hill eaten away by the sea revealed below the Byzantine level the existence of walls built of small unworked stones and no mortar. Amongst these walls are fragments of ordinary black glazed ware. Towards the foot of the hill to the west are some big, roughly-worked blocks: these probably are the remains of the wall of the town. Below the hill to the north-west, close to the shore of a little cove where a small stream runs into the sea, is a chapel dedicated to the Virgin. It is principally built of squared blocks of *poros*. Round it in the ground are long oblong blocks of limestone. To the west of the church there are obvious remains of a Doric temple. Five longish column drums with twenty flutes lie on the ground. Sticking up from the ground are the ends of three more similar drums, two close together and one a little distance away from them. These seem to be the lowest drums of columns still in position on the stylobate. They are of *poros*, coated with stucco, and measure 55 cm. in diameter. Apparently the temple was peripteral. I was told that the statue of a boy was once found here. If we may identify the whole of the mountainous extremity of the Magesian peninsula as Mount Tisseum,²² this temple might be that dedicated to Artemis mentioned by Valerius Flaccus.²³

Close to the shore of the cove of Kato Georgi, twenty minutes to south of the temple, some round and square tiles have been found in a kind of cellar under a modern house. Probably in antiquity as now there were a few fishermen's houses here. This small settlement serves as a ferry station for those wishing to go to Skiathos.

At Aphatae (Plataniā) there are no ruins. I was given a coarse, black, glazed kylix that was recently found in a tomb a little above the harbour. This is now in the Volo Museum.

§ 3.—Olizon.²⁴

This is the most southern according to our interpretation of Scylax of the towns within the gulf. It is placed by all authorities at the Palaeókastro which stands on the narrow isthmus uniting the peninsula of Trikeri to the mainland. This is on a steep, isolated hill completely guarding the passage of the isthmus, and the two harbours to the north and the south. On the north-west of the hill are traces of the lower courses of a wall built of big blocks in irregular courses. Local information says that the wall went all round the hill, but was recently destroyed to form cultivation terraces. On the south-west are some Byzantine ruins. Towards the same side is a deep natural fissure in the rock said to communicate with the sea to the south; the

²² Polybios, x. 42 = Livy, xxviii. 5.

²³ *ib.* 7.

²⁴ *Iliad*, ii. 717; Ptolemy, *Thema* 8;

Stephanus, *s.v.*; Strabo, ix. 436; Leake, p. 294; Mézières, p. 163; Bursian, p. 161; Georgiades, p. 110.

natives say that in winter it smokes like a steamer. Near here I was shewn a statue base 41 m. and 25 m. wide, with dowel holes in its top; it bears this inscription:—

ΤΟΝΗΡΑΚΑΗ
ΜΕΝΑΝΔΡΟΣ

Below the stone is broken; it probably ended with the one word ΑΝΕΘΗΚΕ. It is not earlier than the first century A.D. On a bluff to the south of the Palaeókastro and near the shore are two rock-cut graves. On a low hill to the south-east are remains of a small building of local marble. No plan can be made out; but it was perhaps a small prostyle temple. I was told there were some Corinthian capitals here some years ago.

§ 4.—*Tisaeum*,²⁸ and *Aeantium*.

I have above conjectured that perhaps the mountain at the end of the main peninsula above Platania and Kato Georgi is Tisaeum. Our principal authorities for its position are Polybius and Livy. They state that Philip V. in the campaign of 207 B.C. against Sulpicius and Attalus I. established a signal station in connexion with others in Phocis, Euboea, and Peparethus, to signal to Demetrius the news of any movement of the enemy who had just been ravaging Peparethus and soon attacked Oreus. The two highest points in the south of the peninsula are a peak in the isthmus just west of Olizon, and another somewhat lower a little north of Platania. Both are equally favourably placed to signal to Phocis, Euboea, and Demetrius. The latter however better commands the open sea towards Peparethus. This peak then is perhaps Tisaeum. The Aeantium promunturium we must then identify with the peninsula of Trikeri and in its north-eastern angle place the Ἰσάαι λιμὴν of Seylax.

§ 5.—*Spalathra*.²⁹

The next site north of Olizon is a hill called Chortokastro, just at Chortos the *skala* of the prosperous village of Argelaste, which lies in an upland plain about an hour from the shore. The kastro is a steep, isolated hill standing close by the shore. Nothing is now visible, as the site is cultivated, except fragments of ordinary coarse pottery. The natives however say that here have been found a mosaic floor, tiles, marble slabs, statues, and other things. Tombs are found in the neighbourhood. The Demarch shewed me a bronze strainer-like ladle, and an iron knife from a tomb, and also two vases. One of these is of red-figure style and shews

²⁸ Polybius, x. 42=Livy, xxviii. 5; Apollonius Rhodius, l. 568; Valerius Flaccus, *loc. cit.*; Leske, p. 397; Bursian, p. 100; Georgiades, p. 22.

²⁹ Pliny, *loc. cit.*; Ptolemy, iii. 15, § 16;

Leske, p. 397; Bursian, p. 101; Georgiades, p. 22.

³⁰ Stephanus, s.v.; Pliny, *loc. cit.*; Leske, p. 384; Mézières, p. 169; Bursian, p. 101; Georgiades, p. 113.

a Satyr and a nymph; the other is of ordinary black-glazed ware but both are of good style. At Chortos I was shewn this inscription:

ΦΙΛΟΚΡΑΤΗΣ
ΘΡΑΣΩΝΙΔΟΥΘΑΣΙΟΣ

on a plain gable-topped stele: the lettering is good and points to the third century B.C. The name Thrasonides is a genuine Thasian name.³¹

At Argelaste I was shewn two inscriptions. Each side of the door of the church of the Ἁγιοὶ Ἀνάρχυροι.

	<i>Rosette.</i>		<i>Rosette.</i>
<i>Right</i>	ΗΓΕΣ	<i>Left</i>	ΑΤΑ
	MEN		ΟΥ
	ΕΟΙΡ		ΕΚΘΕ
	ΕΩΦΡ		ΕΚΟΥ
	ΑΥΧΑ		

ΗΓΕΣ[ΙΣΤΡ]ΑΤΑ
MEN[ΙΠΠ]ΟΥ
ΕΩΦΡ[ΟΝΙ]ΕΚΘΕ
ΕΩΦΡ[ΟΝΙ]ΕΚΟΥ
? ΑΥΧΑ[ΙΟΣ] ?

The stele seems to have been used twice; in the first two rows the lettering is good: in the others bad.

In the same church, stele with anthemion top.

ΣΙΜΙΑΣ

It is broken below this name and shews traces of other letters.

In the Museum at Volo (No. 82) with several other³² inscriptions—chiefly funereal—from this neighbourhood is the remarkable stele here illustrated (Fig. 1). It shews a relief field enclosed by two square pilasters supporting a plain architrave ornamented at its ends and in the centre with acroteria. Placed obliquely in the field from right to left and flying downwards is a winged thunderbolt. On the architrave is inscribed:

ΕΡΓΙΑΣΔΙΟΝΥΣΙΟΥΥΠΕΡΤΟΥΑΔΕΛ
ΦΟΥΕΥΑΝΔΡΟΥΟΝΤΟΣΑΙΧΜΑΛΩΤ(ΟΥ)

and below

. . . . [ΕΥ]ΞΑΜΕΝΟΣ

Before εὐξάμενος we should supply the name of the god to whom this relief

³¹ *Ath. Mitt.* 1903, p. 438, l. 22.

³² *E.g.* Nos. 103, 107 = *Mon. Ant. Linc.* viii. p. 84, Nos. 81, 84, 108 (Dedication to Heracles), and two unpublished inscriptions.

was dedicated, probably ΤΩΙΔΙΩ or ΔΙΑΚΡΑΙΩΙ, if we are to assume that the thunderbolt is the symbol of the god invoked on behalf of the prisoner.

Near Argelastē, but to the east of the village, two celts have been found which are now in the Volo Museum.³² They are made of oval-shaped stones, of which one end has been ground down to form a blade. They are about 10 m. long.

Georgiades places Spalathra on a hill called Mpaou, a little to the north of Chortos. On this hill there is a monastery of St. Nicholas and the ruins



FIG. 1.

of a Byzantine church in which are some squared blocks, and Georgiades says others have been found near by as well as tombs. But the hill of Mpaou though higher than that of Chortos is not of sufficient natural strength to be a city site, since it is united to the main range by a narrow neck. At all events if Spalathra was not at Chortos or at Mpaou, it must have been, to judge from the quantity of Hellenic remains, somewhere in this neighbourhood. Leake places at Chortos the hypothetical city of Magnesia, whose very existence is extremely doubtful.³⁴

³² No. 125.

³⁴ Demosthenes, *Olynth.* i. 12, 15, ii. 20; *Philipp.* ii. 71; Scholiast on Apollonius Rhodius, l. 580; Pausanias, vii. 7, 6; Demosthenes (*c. Neerum*, 1382) speaks of Magnesia as a

district with Thessaly, Ionia, etc. Pausanias obviously means Demetrias. Perhaps Demetrias as the capital of the autonomous Magnetes had its name changed to Magnesia. Demosthenes clearly always considers Magnesia

§ 6.—*Leiphokastro*.²⁵

About an hour and a half north of Chortas and an hour west of Argelaste is Leiphokastro. Here is a mill by the sea at the end of a small ravine, and on a low hill by the shore and on a narrow peninsula are many Byzantine ruins. There are remains of the following churches, Panagia, Hagia Euphemia, Hagios Panteleimon, Hagios Nikolaos, and Hagioi Apostoloi. Amongst these one can see a few Byzantine capitals of poor style and two columns of *verde antico*. There are no traces of walls nor of any Hellenic remains.

It seems however to have been an important Byzantine site. The natives informed us that there are traces of an ancient road running eastward from Leiphokastro, which lies on a narrow strip of flattish land between the hills and the sea, amongst the hills towards Neochori. This probably led to a place called Lai near Neochori, close to the eastern coast of the peninsula. Here there was a large settlement, also purely Byzantine. There are four churches all in ruins, Hagios Georgios, Hagios Ioannes, Hagios Elias, and Panagia. The latter, of which only the foundations are left, has recently been excavated; why I do not know. The plan is somewhat interesting.²⁶ The church, which is seventeen metres long, has a nave and two aisles. There is only one apse at the end of the nave. There is a narthex with three doors leading into the nave and aisles, and into the narthex itself there is only one door. At the east end of the southern aisle is a grave; and at the west end of the northern one a cemented basin. In plan and size this church is much more pretentious than the others. All are badly built of brick, small stones, and mortar. About an hour to the east is a small harbour on the coast, and a little Kastro Hagios Demetrios. We seem to have here a settlement of the later imperial period with a harbour on each coast. The earliest coins from the site I saw were of Marcus Aurelius. Third-century coins seem common here, and also Byzantine coins, the latter unfortunately very illegible. The most distinguishable of them were the usual types attributed to John Zimisceus, and some of Justinian. A little further north of Hagios Demetrios there is another Byzantine Palaeókastro; this however I did not visit.

§ 7.—*Kopaki*.²⁷

Georgiades places this town at Leiphokastro, which is not very probable, since as we have seen there are no Hellenic remains there. Mézières puts it

as a district. The scholiast on Apollonius has no authority: he is only a commentator; cf. Kretschmann, *op. cit.* p. 15; Mézières, p. 173; Barsian, p. 102.

²⁵ Mézières, p. 177; Georgiades, p. 112.

²⁶ For the plan compare the Basilica type

shown by the fourth church at Bīn hīr kīlīss, Strzykowski, *Kleinasiens*, p. 58, Fig. 44.

²⁷ Scylax, *loc. cit.*; Stephanus, *s.v. Kopaki*; Mézières, p. 178; Barsian, p. 191; Georgiades, p. 114.

at a place some distance north of Leiphoakastro called *Κορακόπυργος* or *Παλαιόπυργος*. Here where a ruined square tower stands on a low isolated hill close to the sea, there are no Hellenic remains, save late graves. This hill is on the south side of a wide, fertile, well-watered valley. On the north of the valley at the foot of the hill is an isolated hill called *Petrálona*. Near here were found the two fragments of the famous Apollo *Koropaios* inscription.³⁸ Probably in Scylax we should read *Κορόπη* instead of *Κορακαί*. At *Petrálona* there is nothing to be seen; the hill is terraced, and though big stones lie all about there are no traces of walls. However, since it is hardly likely that the big slabs of the inscription could have been taken far, we must assume *Koropē* to have lain here.

§ 8.—*Methone*.³⁹

This town was placed by Mézières at *Lechonia*. This as Bursian points out is unsuitable, since the *Lechonia* site is necessary for *Neleia*, which was also Leake's view. Georgiades follows Bursian's view. Close to *Kahnēra* the *skala* of *Milies* (*Μηλειαίς*) some remains of antiquity have been found, in particular two busts which were stolen and sold in Smyrna in 1827. An inscription of the *Magnesian confederacy* was also found here. Lack of time prevented me from visiting the site, but I was assured by natives that nothing is to be seen there. Near *Milies* itself several inscriptions have been found, especially of the archaic *Thessalian* type.

§ 9.—*Neleia*.⁴⁰

This town, as shewn above, must have lain to the south of *Demetrias*. Close to the modern village *Lechonia*, which lies at the south end of the fertile plain of *Agria*, is a hill called *Νεβεστίκι*. Round this hill on the south and west sides runs a *Pelasgian* wall. This wall is built of rough blocks of various sizes with no regard to courses or jointing (Fig. 2). Some of the blocks are very big: in places the wall is as much as two metres high; it now serves as a terrace wall. On top of the hill ordinary black-glazed potsherds are visible. On a steep hill the east side of a ravine from *Νεβεστίκι* is a ruined *Byzantine* castle. At *Neleia* we must place the seat of the worship of *Aphrodite Neleia* which we know of from an inscription.⁴¹ To judge by

³⁸ *Att. Mitt.* 1882, p. 69 *seqq.* = Dittmeyer, *Syll.* 780.

³⁹ *Hist.* ii. 716; Stephanus, *c.* 11; Strabo, *l.* 436; Pliny, *loc. cit.*; Scylax, *loc. cit.*; Solinus, *ed. Mommsen* (1895), *v.* 8, § 7; Mézières, pp. 184, 187; Bursian, p. 102; Georgiades, p. 116.

⁴⁰ Strabo, *l.* 436; Leake, p. 379; Mézières, p. 188; Bursian, p. 102; Georgiades, p. 116.

⁴¹ *Att. Mitt.* 1890, p. 303, No. 12. Perhaps we should read *το τῷ ἱερῷ τῆς Ἀφροδίτης Νηλείας* in the Kleitor inscription (*Att. Mitt.* 1881, p. 304 n. 1-25). Probably the coin with the inscription *Ἀφροδίτη Νηλεία* published by Imhoof-Blumer and attributed to *Magnesia ad Maeandrium* should read *Ἀφροδίτη Νηλεία* and belong to the *Magnetae* (v. Imhoof-Blumer, *Mann. Graeciae*, p. 292, 91).

the character of its wall, Neleia was probably one of the older towns of the Magnes.

§ 10.—*Demetrias, and Iolcus.*

Fredrich has recently published a full account of Demetrias⁴³ with a plan of the site, to which I added a few notes. To this account I have as yet nothing further to add. Iolcus⁴⁴ was already even in Strabo's time only a *τόπος*, and the shore north of Demetrias was called Iolcus. Leake identified it with the hill of Episkope which stands close to the village called Vlachomachala, or Allemerià, one of the many small villages at the foot of Pelion on the edge



Fig. 2

of the plain of Volo (Fig. 3). This identification has been adopted by Mézières, Bursian, and Georgiades. There seems no reason for rejecting it, even though no remains of antiquity are now visible on the site.⁴⁵ The hill is crowned by a church also called Episkope. In this church are many marble blocks, and a fragment of a large Ionic capital. Leake states however that large squared blocks of stone forming part of a wall once lay near the bottom of the hill. In the walls of the church are many interesting Byzantine reliefs. On the north and east walls are reliefs shewing peacocks

⁴³ *Att. Mitt.*, 1906, pp. 221-244, Pl. IX.

⁴⁴ *Iliad*, ii. 712; *Odyssey*, xi. 256; Apollodorus, i. 9, § 11; Pindar, *Nem.* iv. 88; Herodotus, v. 94; Livy, *lib.* 12, 13; Pliny, *loc. cit.*; Seylax, *loc. cit.*; Strabo, ix. 436, 438; Leake, p. 379; Mézières, p. 160; Usinger, *op. cit.* p. 97; Bursian, p. 108; Georgiades, pp. 124, 125.

⁴⁵ Its distance from Demetrias agrees with Strabo's estimate of seven stades. In recent rebuilding operations within the Kastro at Volo, the only hill on a level and marshy coast, much bronze age and Mycenaean pottery has been found. This site was probably the port of Iolcus and Episkope its citadel.

and the double eagle, and another of the Archangel Michael inscribed with his name. Over the north door is the inscription:—

ὁ Δημητριάδος κάλιστε ?
καὶ κτήτορ τῆς ἐκκλησίας ἐστ. ΞΞΘΜΞ ? ⁴⁰

In the east end is another largish relief. On the right is a bearded figure in a long robe on an elaborate throne in profile to the left. In the centre is the Virgin *en face* wearing a nimbus: she is clad in a girl chiton with a himation round her shoulders. Christ is on the left crowned with a nimbus containing a cross and clad in a short chiton; he advances to the right.

Makynitza

Ago Volo

Portaria

Pellon



Episkope

Vlachomachali

FIG. 3.—VIEW OF N.W. SIDE OF PELJON FROM DEMETRIAS.

The Virgin holds his left wrist with her right hand. Over the figures of Christ and the Virgin is inscribed:—

Η ΜΑΚΡΙΗ ΜΡ ΘΥ
ΙΣ ΧΣ ΤΙΣΣΑ

and between them:—

ΔΕΗ
CICEV
TEΛΘC
ΛΕΟΝ
ΤΙΟVMO
NAXOV

⁴⁰ These letters conceal the date, which is, if one may venture a guess, 7146, that is 1638 A.D.

and over the bearded figure :—

ΚΑΙ ΘΥΕΙΛΕΠΙ
ΚΕΥΙΣ

Part of the sense of the inscription is quite clear, but the rest, even if copied correctly, is unintelligible. The prominent position assigned to the Virgin in this relief is noticeable. And in any case this relief and that of St. Michael



FIG. 4.

are remarkable owing to the great rarity of Byzantine figure sculptures of sacred subjects.

In a small wayside shrine by a spring close to the Church is a gable-topped marble slab. It is most wonderfully decorated with a finely carved pattern of scrolls and circles. I do not know what style of art it represents. It seems much too good for Byzantine, and is not Greek (Fig. 4).

§ 11.—*Orminion*.⁴⁶

Strabo, who says that this place was a *κώμη* under Pelion against the gulf, identifies it with the Homeric Ormanion, and thus says it must have been near Lake Boelbeis. Georgiades points out the incorrectness of this identification. If Orminion were really Ormenion, why should the forces of



FIG. 5.

the latter in Homer be led by Eurypylus rather than by Eumelus or Philoctetes? Ormenion according to Homer was in Northern Thessaly, since it occurs between the districts of Tricca and Oloosson (Elassona). Strabo says Orminion was only twenty stades from Iolcus. Mézières tries to compromise

⁴⁶ Strabo, ix. 436, 438; xi. 503, 530; cf. Bunisia, p. 103; Georgiades, p. 127. *Itak*, ii. 734; Leake, p. 433; Mézières, p. 193;

with Strabo's account and places the site at Kaprena. This village is however much more than twenty stades from Iolcus. Klepert recognizing the faultiness of this view places Orminion at Dhinini, a village about twenty stades to the west of Volo, and famous for its tholos tombs and bronze age and Mycenaean site.

Georgiades suggests that Orminion may have been at Portariá (Fig. 3), a large village on Pelion two hours above Iolcus (Episkope). Here some graves have been found, and some grave-reliefs also. Three of the latter are now in the Volo Museum. Two of these,⁴⁷ of which one shews a man rowing a boat to the left, and the other shews a woman wearing a long chiton, were once in the walls of Hagios Nikolaos, and are of late work, not earlier than the second century A.D. A third relief⁴⁸ is earlier and of better style (Fig. 5). The relief field is bordered by two Corinthian pilasters supporting an architrave



FIG. 5.

carrying a pediment. In the pediment is a rosette, below which two birds support a garland. In the field there are a girl and a boy standing *en face*: she is clad in chiton and himation, and he has only a chlamys over his shoulders. Her left hand rests on his right shoulder: he holds a bird in his arms. At his feet is a dog, and by her right side is a birdcage. The girl is obviously older than the boy. It is a pleasing and naturally rendered subject. On the architrave is inscribed:—

ΕΥΠΡΑ[ΞΙ]Σ///ΑΡΙΣΤΟΒΟΥΛΟΣ

At the place called Διδω where graves have been found there is nothing to be seen.

⁴⁷ Nos. 58, 59.

⁴⁸ No. 67.

In the church of the *Harayia* is a late grave relief; and in Hagios Nikolaos is some Byzantine sculptured decoration. In the now deserted monastery of St. John the Baptist is a late relief of the 'funeral feast' type and many fragments of Byzantine reliefs. Most interesting is a Christian relief (Fig. 6) over a spring in the court. It is 1.00 m. long by .20 m. high. In the centre is a bearded figure with a nimbus, seated on a throne with hands upraised. On either side are bearded men standing and reading books at desks. Beyond them are three other bearded figures seated at a table eating (?) : one sits at the head and the other two sit at the side. In style the relief is not bad, and does not appear to be very late. I cannot find mention of any similar reliefs, nor have I ever seen anything like it in Greece. It seems to represent a scene of monastery life; one of the novices or junior monks reads a passage of Scripture to the others while at their evening meal. On the whole from a consideration of the extant remains, there is no decisive reason for placing Orminion at Portaria, but it is a possible site.

§ 12.—*Pagassæ*.⁴⁹

There is fortunately no doubt about the site of Pagassæ. It stood on the rocky promontory opposite to Demetrias, on the other side of Volo harbour.



FIG. 7. (From Photograph by Dr. Friedrich.)

Leake was the first to identify the site, and his view has been accepted by Mézières, Bursian, and Georgiades. The site divides itself into two parts, the lower town on the low hills near the seashore round the lighthouse, and the acropolis on a steep and rocky hill inland to the north-west whose easternmost precipitous face touches the north-western corner of the Volo harbour.

⁴⁹ Pliny, iv. 2, 15; Pomponius Mela, ii. 3, § 6; Propertius, i. 20, 17; Demosthenes, *Ol.* i. 11, 13; Diodorus, xvi. 3, 1; Scylax, 64; Strabo, ix. 456; Herod. *Scut. Her.* 79; Apol-

lonius Rhodius, i. 403; Hyginus, *Astron.* ii. 37; Leake, p. 369; Hering, *op. cit.* p. 103; Bursian, p. 69; Georgiades, p. 149; Badwell, *Tour through Greece*, ii. p. 87.

All round the lighthouse promontory the circuit of the wall may be traced. Only the foundations are visible: they are built of square blocks laid in fairly regular courses. The south-western and north-eastern walls may be followed across the narrow valley through which passes the Volo-Almyro road. As one follows the south-western wall where it mounts the low hills to the west before reaching the steep hill already mentioned, there are portions of the wall in a fairly good state of preservation. In places it is well over a metre high. Its construction is fairly archaic: it is built of rough blocks without much care as regards jointing or regular courses (Fig. 7). It shows a kind of construction midway between true polygonal and regular ashlar masonry. Further where the wall crosses a narrow saddle between the low hills and the steep hill, the site of the west gate is clearly visible. The approach is narrow and enters obliquely between a projecting tower on the right and the wall on the left. This plan of gate-building is characteristic of Hellenistic fortifica-



FIG. 8. (From Photograph by Dr. Friedrich.)

tion, for example at Pergamum and Demetrias. But from before this gate and after it the character of the wall changes. It is built with regular courses of rather small well-squared blocks (Fig. 8). Towers are frequent and rather square in plan: they are on the average 7.25 metres deep and 9.30 metres long. The wall is about 2.85 m. thick. The acropolis is at the eastern end of this rocky hill, where it falls precipitously to the harbour of Volo. The acropolis is formed as at Demetrias by the splitting of the wall into two branches. These walls spread out, enclosing a large space on the highest part of the hill, and then rejoin. Here the use of unbaked brick for the superstructure of the walls and towers is clearly discernible. It also seems to have been used for some of the towers in the stretch of wall between the west gate and the acropolis. We can perhaps distinguish three periods in the wall: (1) Archaic period, wall below west gate; (2) Fourth century, wall between west gate and acropolis; (3) Late Hellenistic, acropolis and towers to wall between west gate

and acropolis. The use of unbaked brick here seems to denote a late period, as also at Demetrias. The towers clearly are not contemporaneous with those of Demetrias: at the latter city they usually measure 6.10 m. \times 2.40 m., here on the contrary 7.25 m. \times 0.30 m. Pagasae was one of the cities depopulated to create Demetrias therefore this acropolis can hardly be early Hellenistic. It probably dates from the second or first century B.C. when Pagasae became once more prosperous as the port of Pherae. A tower, at the eastern end of the acropolis where the walls reunite, is built of fine ashlar masonry (Fig. 9), and still stands to a height of over three metres. The wall is built in the usual manner elsewhere; only the facings are properly constructed with occasional bonding courses to tie them together. Between the facings there is a packing of earth and stones. Where the acropolis walls are close together, the wall is only 1.80–2.10 m. thick and consists of the two facings bonded together, the inner one being less well



FIG. 9. (From Photograph by Dr. Frodinck.)

built. The course of the wall down the precipitous end of this steep hill is not to be traced. But it is to be found again crossing the plain where the Volo-Almyro road passes, to the lighthouse promontory. Here are traces of a gate, inside which the ruined piers of a late Roman aqueduct are visible, and also the remains of some late building. At the foot of the rocky hill close to the shore, where the salt springs supposed to give the city its name bubble up, is a small flight of steps cut in the rock. They lead to a small terrace: here are many fragments of marble and pottery. It was possibly the site of a shrine. By the lighthouse there is a quay whose antiquity is doubtful. The site of the theatre mentioned by Leake is no longer distinguishable. According to Georgiades the inscribed stelae now walled up in the church of Hagios Nikolaos at Volo were found somewhere in the eastern part of Pagasae. It is to be hoped that the site of Pagasae will some time soon be properly planned and described.

§ 13.—*Glaphyreæ*.⁶¹

About two hours north of Volo, amongst the hills separating the plain of Volo from lake Boebeis, is the village of Kaprena. On a peak, a little north of the village and falling steeply to the lake, is the *encreinte* of some ancient city, surrounding the church of Prophetes Elias. The hill is oval in shape and all round it runs a wall more or less well preserved. It is in places as much as 3.15 m. high, and 1.20 m.-1.50 m. thick. In style it may be called polygonal: the blocks are roughly worked according to their natural shapes and packed together. But as the local stone splits naturally into slabs, slabs are commoner than blocks in the wall (Fig. 10). Red potsherds are



FIG. 10.

common on the site, but black-glazed sherds rare. In a field on the west some graves have been found. At Kanalia I was shown a terracotta from this site. It is a male head .08 m. high, hollow moulded. The hair is arranged in one row of tight, formal curls over the forehead. The nose and mouth are firm and strong; the face narrow and the eyes placed obliquely. It seemed good early fifth century work. There are also in the Demarcheion in the same village two inscriptions from Kaprena.

(1) Grave stele: plain pilasters and gable: .77 m. x .58 m.

On architrave, good lettering:

ΣΑΙΔΡΟΣ Ε(Ι)ΠΟΥ ΗΡΩΣ = Σάνδρος Σέμου ἥρωος

⁶¹ *Iliad*, ii. 712; Stephanus, s.v.; Leake, *Georgiades*, p. 129; p. 432; Mélières, p. 193; Dorian, p. 103;

Below in field, rough lettering:

ΛΥCΙΜΑΧΑΜΑΡΚΟΥ
ΗΡΩCΧΡΗCΤΗΧΕΡΕ
ΜΑΡΚΟCΑΙCΧΡΟΝΝΟC

This stele was clearly used twice over:

(2) Pointed gable top, 95 m. × 24 m. Letters 0.2 m. high: good period.

ΕΡΜΩΝΕΥΞΑ
ΜΕΝΟΞΔΙΟΝΥ
ΣΩΤΗΝΔΕ
ΑΝΕΘΗΚΕ
ΔΙΓΑΡ ΜΕΝ[ΙΣ] ?
[Ι]CΘCΚΑΙΝΙ[Κ]
ΑΝΔΡΟC

Leake identifies this site at Kaprena with Glaphyrae, a city whose inhabitants occur in the Homeric Catalogue with those of Boebe under the command of Eumelus. Mézières wished to call it Ormenion. Bursian and Georgiades both accept Leake's identification, which is the most probable.

§ 14.—Boebe.⁴¹

From Kaprena a steep path leads down a difficult ravine, in which there are to be found traces of a rock-cut road, to the shores of the lake. A little over an hour from Kaprena and more than half-way to Kanalia (Boebe) stands the church of Hagios Nikolaos. This, as stated by Leake, is all that is left of the village of Karla which gave the lake its modern name. In this church are many architectural fragments. The altar is an Attic-Ionic column base 68 m. square and 1.20 m. in circumference. The walls contain many squared blocks of poros and of marble. There are also two column drums with twenty flutes and 52 m. in diameter. In all probability a temple once stood on this spot. Near the village of Kanalia the centre of the modern deme of Boebe, there are three Palaiokastra. The northernmost is a very small hill surmounted by remains of some late fort built of small rough stones and mortar. The second a little further to the south is steeper and its crest is surrounded by a 'Pelasgian' wall of rough stones loosely packed together (Fig. 11). It is now not more than a metre high: it resembles a little the wall of Glaphyrae. At the foot of this hill to the north is a very good spring.

⁴¹ *Iliad*, ii. 712; Strabo, ix. 436; Herodotus, vii. 129; Euripides, *Alc.* 590; Pindar, *Pyth.* iii. 34; Lucan, vii. 176; Propertius, ii.

2. 11; Leake, p. 428; Mézières, p. 107; Bursian, p. 63; Georgiades, pp. 128 *seqq.*

Near this spring is the monastery of Hagios Athanasios where Leake says he saw large masses of stone. There are some squared blocks here now, and late column drums. Leake also saw quadrangular blocks of stone on the second Palaikastro which apparently no longer exist, and at the back of it graves built of slabs. The third Palaikastro is a low hill lying a little further south. This is covered with traces of mortar and tiles, and does not seem to have been an Hellenic site. At its foot to the west was the peculiar building described fully by Leake; this as stated by Georgiades has since been destroyed by treasure seekers. If Leake was right in stating that 'a small quantity of cement mixed with broken tiles has been employed in this



FIG. 11.

masonry,' it cannot have been Hellenic. In the vineyards below this third Palaikastro, slab-built graves are often found. Over two of these the following inscriptions have been recently found:—

- (1) Stele, stone, 72 m. x 41 m.: reads downwards:

ΓΕΝΝΑΙΑ

Good fifth century lettering. The name occurs in an inscription in Volo Museum, No. 7, *Γενναία* | *Τεσσαγέρων* | *Θηβαία*. Letters are 0.6 m. high.

- (2) Stele: rough slab: broken at top: reads downwards: 85 m. x 30 m.

... ΜΑΚΕΚΑΕΣ
... ΑΝΤΑ

Letters .07 m. high. Dr. Wilhelm suggests that this inscription should be restored as follows:—

[ΕΥΔΑΜΟΤΟΔΕΣΑ]ΜΑΚΕΚΛΕΣ
[ΕΤΑΙΗΥΙΟΣΕΥ]ΑΝΤΑ²²

From one of these graves I was shown the bows of two bronze fibulae .05 m. and .07 m. long. They are of a rather unusual type, being made of a solid rod ornamented with circular bosses and sharp ridges. For their type compare the geometric fibula from Thebes figured by Ridgeway.²³ We may thus perhaps say that this type of fibula was still being used in Thessaly in the sixth century.

Kanalia, which lies just at the foot of the northern Palaiokastro, between the hills and the lake, is quite a modern village dependent on the lake fishery which is strictly preserved and managed by a company. Carp is the principal fish.

A tedious climb of an hour to a place called ὁ τεῖχος on the steep hills above the village, brought us to a cliff. Thus we found our informant was justified in stating that ὁ τεῖχος was so well built that it resembled living rock.

ALAN J. R. WACE.

APPENDIX.

The Imperial Coinage of the Magnesians.

During my journey down the Magnesian peninsula I saw many coins. Amongst these I obtained myself are two imperial coins of the Magnesians of Severus Alexander and Gallienus. Amongst my notes I find mention of several others. The information as to the provenance being certain, we are enabled to attribute to the Magnesians a series of bronze coins hitherto classed under Magnesia ad Maeandrum. The reverse types shew a centaur, the Argo, or a deity identifiable from the legend as Zeus Akraios who as we know was worshipped on the summit of Pelion.²⁴ The catalogue of known types and varieties is as follows:

I. Augustus (1): beardless head to r.; dot border: . . . CCEBACT.

Rev. centaur to r.

[Athens, Magnesians.] Fig. 12; 3.

²² The name Εὐδαμώτης is of course arbitrary. Προδαμώτης would suit as well; for the type of the inscription and the name compare Kaibel, 182 = *I.G.* ix. 1, 321; Solmsen, *Rhein. Mus.* lxx, p. 405; and also *Ath. Mitt.* 1886, p. 248; Kern, *Journ. Theor. Antiquiss. Neph.* p. 6;

Solmsen, *Rhein. Mus.* lxxiii, p. 511 (undated). For Εὐδαμώτης cf. *Εὐδαμώτης*, Pausanias, i. 11. 10.

²³ *Early Age of Greece*, p. 568, Fig. 119.

²⁴ Democritus apud *P.H.G.* ii. 262; *Ath. Mitt.* 1882, p. 82 seq.; *ibid.* 1882, p. 235, 2; *ibid.* 1889, p. 53 = *B.C.H.* 1889, p. 271.

2. Nero: head to r., laur.; dot border; $\text{CEBAC}|\text{TOC}$.
Rev. centaur to r., r. hand outstretched, l. holds branch on
 shoulder; $\text{MAF}|\text{NH}$, beneath M (¹).
 [Brit. Museum, *Magnetes*.⁶⁵] Fig. 12, 4.
3. Marcus Aurelius: head to r., laur.; $\text{AVTMAVP}|\text{ANTONINOC}$.
Rev. Aphrodite clad in chiton standing to r., r. hand holds sceptre, l. a
 pomegranate; behind her Eros to r.; $\text{N}\omega\text{THN}|\text{IAMA}|\text{I}\varnothing\text{AHNO}\varnothing\Phi\text{A}$.



FIG. 12.

Imhoof-Blumer reads $\text{MHA}\epsilon\text{IA}$: this I think should be $\text{NHA}\epsilon\text{IA}$.
 Aphrodite Nelaia was a goddess of the Magnetes, and the
 reverse legend agrees in type with the other coins reading
 $\text{MAGNHT}\omega\text{NAKPAIOC}$, etc.⁶⁶
 [Berlin, *Magnesia ad Maeandrum*.]

4. Septimius Severus: head to r., dot border; $\text{CE} . . . \text{HPOC}$.
Rev. Zeus Akraios nude standing three-quarter profile to left,

⁶⁵ *Wittb. Num. Chron.* 1900, p. 3, Pl. II. 1.

⁶⁶ Imhoof-Blumer, *Menn. Græciss.* p. 292.

⁶⁷ 91; for Aphrodite Nelaia, cf. *Ath. Mitt.* 1890,
 p. 203, 12, v, above, p. 153.

r. hand holds sceptre, l. a thunderbolt; ΜΑΓΝΗΤΩΝ
ΑΚΡΑΙΟΣ.

[Athens, Magnetes.] Fig. 12, 5.

5. Geta: head to r.; ΠΟΥΛΟΣ ΕΠΙΓΕΤΑΣ.

Rev. same type and inscription as 4.

[Imhoof-Blumer, *Magnesia ad Maeandrum*.²⁷]

6. Severus Alexander: head to r., dot border; . . . ΠΑΛΕΞΑΝΔΡΟΣ.

Rev. Argo with rowers to l.; . . . ΗΤΩΝ ΑΡ . . . Fig. 12, 6.

[Brit. Mus. *Magnesia ad Maeandrum*, 66; A. J. B. W.]

7. Severus Alexander: head to r., dot border; . . . ΠΑΛΕΞΑΝΔΡΟΣ.

Rev. same type and inscription as 4.

[Seen at Argelaste by A. J. B. W.]

8. Maximinus: head to r., laur., ΓΑΙΟΥΑΙΩ ΜΑΖΙΜΕΙΝΟΣ.

Rev. same type (apparently) as 6; ΜΑΓΝΗΤΩΝ ΑΡΓΩ.

[Mionnet, *Suppl.* vi. p. 249, 1095, *Magnesia ad Maeandrum*.]

9. Gordianus Pius: head to r., laur.; ΜΑ ΑΝ ΓΟΡΔΙΑΝΟΣ.

Rev. same type and inscription as 8; in field Β.

[Mionnet, *Suppl.* vi. p. 253, 1122, *Magnesia ad Maeandrum*.]

10. Trebomannus Gallus: bust to r., laur.; ΤΡΕΒ ΓΑΛΛΟΣ.

Rev. same type and inscription as 8.

[Brit. Mus. *Magnesia ad Maeandrum*, 103.] Fig. 12, 7.

11. Gallienus: head to r.; . . . ΟΥΒ ΓΑΛΛ . . .

Rev. Argo with rowers to r.; [ΜΑΓΝΗ]ΤΩΝ Α[ΡΓΩ].

[A. J. B. W.; Mionnet, *Suppl.* vi. p. 256, 1141, *Magnesia ad Maeandrum*.] Fig. 12, 8.

Those of these coins that I have seen all correspond in style and fabric, and therefore with the new evidence as regards provenance their reattribution to the Magnetes seems certain. To the list of the autonomous coins of the Magnetes I would add the following:

A. Bearded head to r., dot border; ΜΑΓΝΗΤΩΝ.

Rev. Asclepius enthroned to r., r. hand holds sceptre, l. a snake.

[Athens, Magnetes; Brit. Mus. Magnetes; A. J. B. W.]
Fig. 12, 2.

B. Similar head to r.

Rev. Asclepius enthroned as on A; ΜΑΓΝΗ . . . ; star counter-
mark.

[Brit. Mus. Magnetes.] Fig. 12, 1.

²⁷ Imhoof-Blumer, *Griechische Münzen*, p. 120, 312 (*Abhand. Bay. Akad.* 1888-1890, p. 644).

²⁸ Mionnet remarks on this coin, *cette*

monnaie avait été autrefois attribuée à la Magnésie de Thessalie; elle est ici à sa véritable place.

Of these two *B*'s of better style than *A*, but both are of bad style. They cannot be earlier than the first century before Christ. My notes also contain mention of the following two types as seen in the peninsula; they are probably of the same date.

C. Male figure in boat, illegible inscription.

Rev. centaur; ΜΑΓΝΗΤΩΝ.

D. Apollo (♄) head.

Rev. satyr with torch; ΜΑΓΝΗΤΩΝ.

Since this was first written Dr. Imhoof-Blumer informs me that another specimen in the Lobbecke collection of No. 3 of the list above has been published. It is inscribed on the obverse ΑΥΚΜΑΥΚΟΜΑΝΤΩΝΙΝΟC, and on the reverse ΝΩΤΗΝΓΑΜΑΙΘΛΗΝΟΦΑ.²⁰ This shews that the coin is of Commodus and not Marcus Aurelius. Also it confirms my opinion that Νήλεια and not Μηλεια should be read, thus making it certain that the coin belongs to the Magnesites and not to Magnesia ad Macandrum.

A. J. B. W.

²⁰ Lobbecke, *Z. f. N.* xii. p. 319, Pl. XIII. 4. (Lobbecke reads Μηλεια, but in the plate Νήλεια is quite clear); Imhoof-Blumer, *Griech. Münzen*,

p. 119; I am also informed that Mr. Talbot Ready had not long since a coin in good condition with a similar reverse inscription.

THE ATALANTA OF TEGEA.

THE scanty remains of the pediments of the temple of Athena Alea at Tegea were for many years the basis of all constructive criticism of the style of Scopas; their attribution to him has met with such universal acceptance that I need not here discuss it; in view especially of their extraordinary vigour and originality it seems to me indisputable. The news that the excavation on the site of the temple was to be continued by M. Mendel, of the French School at Athens, was therefore received with the greatest interest, and his publication of his results fully justifies these anticipations. I wish to acknowledge the courtesy with which M. Holleaux, the Director of the French School at Athens, has allowed me to reproduce the illustrations from the *Bulletin de Correspondance Hellénique*; for the use I have made of them in the case of the Atalanta I must accept the responsibility.¹ It is not, however, possible, from the publication alone, to appreciate all the evidence that has to be taken into account. I had an opportunity, in April 1904, of studying carefully the statues in the local museum at Tegea, in company with Mr. D. L. Richmond, of King's College, Cambridge. I think it will conduce to clearness if I say at once that a study of the originals enabled us to make two observations which offer new data for artistic criticism: firstly, that the torso identified by M. Mendel as the torso of Atalanta from the E. pediment is in Parian marble, not in the local Dolianà marble, like the rest of the pedimental figures; and secondly, that the head in Parian marble, which M. Mendel suggested might perhaps belong to a statue by Scopas placed within the temple, almost certainly belongs to this torso of Atalanta. I have not made public these observations at an earlier date, partly because I believe we were not the first to make them; they would, indeed, be likely to occur to any visitor to Tegea; but, so far as I know, they have not yet been published and discussed. The lapse of

¹ In the recent edition of my *Handbook of Greek Sculpture*, Fig. 140, I have joined the head and body together to scale, using the photographic plates in the *Bulletin de Corr. Hell.* xiv, iv and vi. But the original photograph was evidently taken with the torso sloping backward, and so the lower parts of

the figure appear too large in proportion to the upper parts. I have tried to remedy this defect in the accompanying illustration, prepared for me by Mr. Anderson, by sloping the lower part of the photograph reproduced away from the lens at a similar angle.

time has also given an opportunity for weighing more carefully evidence which seems at variance with much that we have before learnt about Scopas.

Before considering this question of the Atalanta in more detail a brief recapitulation of the rest of our evidence as to Scopas at Tegea may seem desirable.



THE ATALANTA OF TEGEA.

We are told by Pausanias that the temple of Athena Alea at Tegea was by far the finest in the Peloponnese. Within it had Ionic columns, and the external order was Doric; there were also Corinthian columns in the inner row at front and back. It was rebuilt after its destruction by fire in 395 B.C. Scopas was the architect; the front pediment contained the hunt of the Calydonian boar. This pediment is described by Pausanias with sufficient

detail to give us some notion of its composition. In the centre was the boar, facing to the left, attacked by the three leading hunters, Atalanta, Meleager, and Theseus; on either side of this central group was a half-fallen figure supported by a comrade, the wounded Ancaeus, and Telamon, who had stumbled, supported by Pelcus; beyond these were the Dioscuri, one on each side, and behind them three other heroes; we cannot tell how the angles of the pediment were filled. On the back pediment was the fight between Achilles and Telephus on the plain of the Caius, but Pausanias unfortunately tells us nothing of its composition. Within the temple there were statues of Pentelic marble by Scopas, set up beside the statue of Athena, on one side Asclepius, on the other Hygieia.

Fragments of sculpture belonging to the pediments of the temple have been known for some time; the more important of them, which are now in the National Museum at Athens, are two heads of heroes, one bare and one helmeted—and the head of a boar. The recent excavations by M. Mendel have led to the discovery of more fragments from the pediments, some of them of a most interesting character. Two more heads, one of them bare, and one of them covered with a lion's scalp, some dogs' heads, and various fragments of limbs, are of the same material as the fragments previously discovered—marble from Doliana near Tegea, which, unfortunately, has little power of resisting exposure to weather and damp. Consequently all are in a poor state of preservation. The most important of the new discoveries is a female torso in Amazonian dress, which can hardly belong to any other figure than Atalanta, and a head which almost certainly belongs to this torso.² Both head and torso are of Parian marble, and one arm and a foot of the same material doubtless belong also to this figure. Though the Parian marble has resisted the decomposing force of the damp ground in which it was buried better than the Doliana marble, and so has preserved its form almost intact, the surface has been almost entirely corroded, so that the effect of the final polish of the surface is lost. In spite of this the head retains a wonderful amount of vigour and freshness of effect, and great individuality of character, and deserves to be ranked, even apart from the circumstances of its discovery, among the finest fourth-century heads that we possess. The difference of material naturally gives rise to the question whether the Parian marble figure belongs to one of the pediments of the temple, and, if so, whether it belongs to the same pediment as the other figures in inferior local marble.

The appropriateness of this Amazonian torso for the huntress Atalanta has already been noticed; and the absence of finish at the back goes to prove that it was a pedimental figure. M. Mendel, who conducted the excavations and published the sculptures that were found in them, had no doubt that it

² I state this opinion after a careful study of the originals in the Museum at Tegea. The fractures do not exactly fit; but the line of a cut—apparently a blow from some sharp instrument—appears on the lower surface and is

continued on the upper. The head, when placed in its proper position on the torso, has a most harmonious effect; scale and material alone suffice to make the connexion probable.

belonged to the same group as the other figures; and it is not difficult to find a reason for the use of Parian marble in the case of *Atalanta*. She was the only female figure in the two pediments, so far as we can judge from the description of Pausanias, and in order to render with due effect the colour and texture of her skin on face, arms, and legs, the sculptor may well have chosen to substitute, in the case of this one figure, Parian marble for Dolianá. The other figures, being male, were very probably coloured all over. In fact the case is almost analogous to the marble insertions in the later metopes of Selinus, which are also used only in the case of female figures; the main difference is that in that case only the nude parts of female figures—face and arms and feet—are made of marble, the rest being of the same local material that sufficed for the male figures. The inferior material at Selinus is, indeed, not marble at all, but limestone; but we have an excellent example of the use of a superior and an inferior marble, under somewhat similar conditions, in the *Demeter of Cnidus*: there the local marble is considered good enough for the draped body of the statue; but Parian marble is used for the head, and to it is due, in no small degree, the extraordinary beauty of the effect; and it is worth noticing, especially in this connexion, that the charioteer frieze of the *Mausoleum*—the part of the sculpture by general consent associated with Scopas—is in Parian marble, and owes something of its beauty to that material, while the rest of the sculpture and architecture is in inferior local marbles. There is, therefore, nothing impossible or even improbable in the use of Parian marble for the only female figure in a pediment of which the rest was made of local marble; the scale and subject are suitable; the only question that remains is that of style, and this must now be considered.

It will be best to take the male heads first, partly because two of them have long been familiar, and are generally recognized as the typical examples of the work of Scopas, partly because their attribution to the pediments cannot be doubted. All of them alike are characterized by an intensity of expression such as is hardly to be found in any other heads that have survived from ancient times. The subjects of the two pediments, the hunt of the Calydonian boar and the battle of Achilles and Telephus, supplied the artist with themes which enabled him to represent all the heroes in the excitement of action and of danger; and he has used the opportunity to the full. Of the two heads that have been known for some time, one is that of a helmeted warrior with his gaze directed upwards—not that he is looking up at an antagonist on a higher level, but that his body was evidently leaning forward, and his head consequently bent back, as is shown by the strained muscles of the neck. The intensity of the expression is, however, enhanced by this position of the head; the eyes are set very deep in their sockets, and heavily overshadowed, at their inner corners, by the strong projection of the brow, which does not, however, as in some later examples of a similar intention on the part of the artist, meet the line of the nose at an acute angle, but arches away from it in a bold curve. At the outer corners the eyes are also heavily overshadowed, here by a projecting mass of flesh or muscle which overhangs and actually

hides in part the upper eyelid. The eyes are very wide-open—with a dilation which comes from fixing the eyes upon a distant object—and therefore suggest the far-away look associated with a passionate nature. A similar impression is conveyed by the dilated nostril and the half-open mouth, the teeth clearly showing between the parted lips. The whole structure of the head is also suitable to the character portrayed; it is of a broad and massive type, and seems to imply that Scopas followed the traditions of Peloponnesian rather than of Attic art. This general description will apply almost equally well to the rest of the male heads from the Tegean pediments. It is true that the other head in Athens, the unhelmeted one, has not the same upward direction of the gaze, nor the same strain on the muscles of the neck, caused by the fact that the figure is bent forward; but it has in a still higher degree the earnest intensity of expression; and this expression is obtained by a similar treatment of the eyes and the surrounding muscles, and is associated with a similar physical type. The same may be said of the recently discovered head of Heracles now at Tegea. This head is characterised by a lion's scalp worn as a helmet, the face of the hero fitting into the open jaws of the beast; the teeth are seen above his forehead, and the mane, finely worked, on the back of his head. Though the face is badly damaged, it is still possible to appreciate, both in full face and in profile, the passionate expression of the deep-set eyes, and to notice the means by which that expression is again rendered. The other newly found male head, which is also in poor preservation, and is somewhat sketchily finished, is similar in character to the rest.

But the interest of the new discoveries centres in the head and torso in Parian marble, which, as we have seen, probably belong to each other, and are to be assigned to the Atalanta of the pediment. She is clad in a chiton which is fastened upon the left shoulder only, leaving the right breast bare. The folds of its drapery are indicated with a flow and vigour which at first sight suggest a comparison with the Attic work of the latter part of the fifth century, and the work under the same influence which we find at Epidaurus and elsewhere in the early part of the fourth century. But a closer examination reveals features which rather recall the characteristics of Hellenistic art, in the restlessness of detail, and the minute touches of realism; this is especially noticeable in the folds just beneath the girdle, which are like those in the torso of Apollo Citharædus from the Mausoleum, another work of the School of Scopas. Such an anticipation of the characteristics of a later age is fully in accord with the style of the male heads from the Tegean pediments; but, when we come to consider the head which, as we have seen reason to believe, almost certainly belongs to this figure of Atalanta, we are at once confronted with a remarkable difference. The expression is, indeed, no less full of life and vigour than in the male heads, and the execution excels theirs in freshness and delicacy. But we can find in the Atalanta nothing of that passionate intensity of gaze which distinguishes the male heads of Tegea beyond all others that have survived from ancient times. The eyes are not set in deep below the brow, nor

have they the wide-open, dilated pupils that we have noticed in the other heads by Scopas; instead of this they are rather long and narrow, and symmetrical in shape. Nor are they overhung at the outer sides by a heavy mass of flesh. This, perhaps, in a youthful female head was hardly to be expected. But instead of it, we notice a curious characteristic which is not dissimilar in character; this is a clearly marked, though delicately rounded, roll of flesh between the brow and the upper eyelid which is continued right round above the inner corner of the eye, to join the swelling at the side of the nose, which itself passes on into the cheek. I do not know any head in which this curious characteristic is so clearly indicated, but several of the heads usually regarded as either attributable to Scopas himself or shewing his influence shew it in some degree;² and it can be traced back, in a rudimentary form, to the heads often associated with Cresilas.³ Though the lower part of the face has a longer, more Attic oval than the male heads, we can still see in the distended nostril and half-open lips, a temperament akin to those of the warriors, though less violent and unrestrained; the general form and character of the face reminds us of the Artemis from the great *Lycomura* group by Danophon.

We need, then, feel no insuperable objection to attributing this figure of Atalanta also to Scopas; but the contrast in expression between Atalanta and the heroes who surround her in the hunt certainly calls for some explanation. The contrast between the calm of Apollo and the excitement of the Lapiths who join in the combat on the Olympian pediment suggests itself as an analogy; but there is no reason to suppose that Atalanta was present only as a spectator; the action of her torso certainly belies it; nor have we any grounds for doubting the identification as given us by Pausanias,⁴ and supposing the figure to be a goddess—say Artemis. It seems more probable that the explanation may be found partly in the sex and the youthfulness of the maiden huntress; and even in the fourth century there may still have remained a half-conscious tradition that Atalanta was no mere heroine but originally a goddess herself. She should not, then, show the stress and passion of combat that have left their trace on the faces of the heroes. For the contrast between calm and passion in the faces of those engaged in the same contest we may compare also the Lapiths and Centaurs of the Parthenon metopes; there it distinguishes the human from the bestial combatants; here, perhaps, the heroine goddess from her human companions. We must remember also that this extreme of expression was a new experiment, and that Scopas might not improbably have shrunk from applying it to female heads as well as to male heads at once, in this early piece of his work. Later we see something of the same tendency in his female heads also, though never in so extreme a form. For an analogous contrast between the

² E.g. The Apollo from the Museum, Brit. Mus. Catalogue, vol. 2 Pl. XX. 2. *J.R.S.* xiii. p. 122. We may also see it in the Demeter of Gades.

³ E.g. The Head of Pericles in the British

Museum, and the Nelson Athlete, *J.R.S.* xviii. Pl. XI.

⁴ Some support may be gained for this suggestion by quoting Pausanias' similar mistake at Olympia, when he took Apollo for Pithonon.

male and female types used by the same artist, we need go no further than to Praxiteles. There is hardly more contrast between the *Heraclès* and the *Atalanta of Tegea*, than between the *Hermès* of Olympia and the *Aphrodite of Cnidus*.

Among female heads that have been associated with Scopas, and that therefore offer themselves here for comparison, is the well-known head from the S. of the Acropolis at Athens,⁶ though this has certain points of resemblance with the *Atalanta*, it also shows points of difference; it is broader and more mature in type. But as its association with Scopas is purely upon grounds of style, it does not afford a very safe criterion for accepting or rejecting such association in a case where the external evidence is strong. It is otherwise with the copy of the maenad of Scopas published by Prof. Treu in the *Mélanges Perrot*.⁷ Here the head is similar in character to the male heads from Tegea, and so far tells against an attribution to Scopas of the head of the *Atalanta*; but we may well imagine that he may later have applied to his treatment of a female head, in the ecstasy of passion, the same devices which he had restricted to the male heads at Tegea, but had refrained from using for his maiden heroine. On the other hand, the drapery of the maenad in its realistic touches, especially in the folds beneath the girdle, reminds us strongly of the Tegean *Atalanta*.

If the conclusion here laid down be accepted, we shall have a new criterion to apply to the identification of works to be associated with Scopas or to be regarded as showing his influence. We have already noted the resemblance to the *Atalanta* of the head of *Artemis* from Lycosura, and the consequent confirmation of the fourth century date of *Damophon*. But it would lead us too far afield if we were to pursue this investigation at present.

The more we study the character of the art of Scopas, the wider and deeper we find his influence to have been, and it can hardly be doubted that new data for comparison will lead to this influence being traced into new channels and recognized in new developments.

ERNEST GARDNER.

⁶ E. A. Gardner, *Handbook of Sculpture*, Fig. 101.

⁷ Fig. V. 111, 217-222.

THE PYRAMID OF MOERIS.

IN my paper on 'the Two Labyrinths' (*J.H.S.* xxv. p. 320) I have throughout spoken of the Pyramid of Hawara, in front of which the Egyptian Labyrinth was erected, as the pyramid of Amenemhat III (Lamaris or Moeris) and have described it as his tomb. Now the southern brick pyramid of Dashur, excavated by MM. de Morgan and Legrain some years ago, also belonged to Amenemhat III, and is claimed by its excavators as the tomb of the king, the old identification, adopted by Lepsius and Petrie, of the Hawara pyramid as his tomb, being considered to be erroneous. As this fact was not mentioned in my former paper I add a short postscript on the subject.

M. de Morgan forgot that many Egyptian kings were provided with two tombs, one of which was a secondary sepulchre built in another part of the country from his real tomb either in order to delude would-be tomb-robbers or as a memorial in some specially sacred place, such as Abydos. Aha, perhaps the earliest King of Egypt, had two tombs, one at Abydos, the other at Nakâda. Tjeser Khetneter, of the IIIrd Dynasty, also had two tombs, one (the Step Pyramid) at Sakâra, the necropolis of Memphis, the other a great *mustaba* at Bêt Khallâf, not far north at Abydos.¹ Seneferu the last king of the same dynasty, had two great stone pyramids, one at Mèdûm, the other at Dashur, both of which are still among the most important ancient monuments of Egypt. Usertsen (Senusret) III (Lachares), the predecessor of Amenemhat III, had, like the latter, a pyramid in the Memphite necropolis (the Northern brick pyramid of Dashur), and also a rock-cut *tub* or gallery-tomb in the southern cliffs of Abydos, excavated by Mears Weigall and Currelly. Aahmes I had a curious and roughly-excavated secondary tomb at Abydos, and without doubt a gallery-tomb in the Dra' Abu 'l-Negga at Thebes. Queen Teta-shern, the grandmother of Aahmes, had her real tomb in the Dra' Abu 'l-Negga, and a mock-tomb (a pyramid) built as a memorial to her by Aahmes at Abydos. All the Abydene tombs were probably mere memorials 'in the sacred land' of Osiris and the reason why no trace of the burials of Aahmes or Usertsen III have been found in the tombs at Abydos is, perhaps, because they were never buried there, their real tombs being in the Dra' Abu 'l-Negga (whence the body of Aahmes was removed to the Deir el-Bahari pit and

¹ *Épaves à Dahshour*, 1894-5 (Vienna, 1903), p. 166.

thence to Bulak Museum in 1881) and at Dashur.² In the same way Amenemhat III had two tombs, the pyramid of Hawara and the southern brick pyramid of Dashur. If his predecessor's real tomb was the northern brick pyramid, it might be supposed that the Dashur tomb is the real burial-place of King Moeris, the Hawara pyramid being a monument put up in the sacred Lake-land of the Fayyum which owed so much to the king and to whose crocodile-god he was so devoted, just as other kings had secondary tombs in the holy land of Osiris at Abydos. This may be, though there seems to be no particular reason why the reverse should not be the correct explanation. We simply do not know. In any case M. de Morgan was right in saying that the southern brick pyramid of Dashur belonged to Amenemhat III but was wrong in saying that the Hawara pyramid did not. Both it and the Labyrinth adjoining were built by him. Whether king Moeris was actually buried at Hawara or at Dashur, later generations regarded the pyramid adjoining the Labyrinth as his actual tomb, and as such I treated it in my paper on 'the Two Labyrinths.'

H. R. HALL.

² It might be objected that the great sarcophagus in the Usertsen tomb would hardly have been dragged down to such a depth had it not been originally intended that the royal body should rest in it, and that a mere memorial tomb at Abydos would hardly have been carried out with full realistic detail, everything being there except the body itself. I do not know, however, that this is impossible, given the idea of making a secondary tomb at all. The two pyramids of Amenemhat III at Dashur and Hawara are equally elaborately built, though one of them was not the actual resting-place of the king. It has occurred to me that perhaps the royal tombs of the First and Second

Dynasties at Umm el-Ga'ab in the necropolis of Abydos may not be in reality the actual tombs of the early kings at all, but simply secondary tombs built as memorials in the holy land of Osiris, the actual sepulchres being elsewhere: Aha certainly had two tombs, one at Umm el-Ga'ab, the other at Nakada, and it may be that the latter was his real tomb. Now these early secondary (?) tombs were furnished as completely as if the kings had actually been buried in them. The mock or imitation tombs, as the pyramid of Teti-shura, were more or less carelessly made of rubble, like the mock pyramid of Mentukhetep at Deir el-Bahari. They are not secondary tombs, properly speaking.

INSCRIPTIONS FROM ASTYPALAEA

1. FOUND in the ground of Michael Palatianos at Martezans; now in a lime-store at Peragialós (the local name for the port or Skala): on the left side of a piece of marble which served as the lintel of a tomb, carved with a simple cornice. 1.27 × 0.31 × 0.17: letters 0.015 regular and carefully cut, equal in size except that Δ and Φ project beyond the lines.

ΜΗΜΟΙ ΠΕΙΝ ΦΕΡΕΘΩ ΔΕ ΜΑΤΗΝ ΠΕΠΟΤΑΙ ΓΑΡ ΟΤΕ ΖΩΝ sic for ΓΑΡ
 ΜΗ ΔΕ ΦΑΓΕΙΝ ΑΡΚΕΐ ΦΛΗΝΑ ΦΟΣΕΣΤΙ ΤΑ ΔΕ
 ΕΙΔΕΝ ΕΚΕΝ ΜΗ ΜΗΣΤΙΚΑΙ ΩΝ ΕΒΙΩΣΑ ΣΥΝ ΥΜΕΙΝ
 Η ΚΡΟΚΟΝ Η ΛΙΒΥΝΟΥΣ ΔΩΡΑ ΦΕΡΕΣΘΕ ΦΙΛΟΙ
 ΤΟΙΣ ΜΥΠΟΔΕΞΑΜΕΝΟΙΣ ΑΝΤΑΞΙΑ ΤΑΥΤΑ ΔΙΔΟΝΤΕΣ
 ΤΑΥΤΕΝ ΕΡΩΝΖΟΝΤΩΝ ΔΟΥΔΕΝ ΕΧΟΥΣΙ ΝΕΚΡΟΙ

Beneath the lintel, placed so as to be read under the doorway by those issuing out, i.e. in the reverse of the epitaph, in large letters 0.025.

ΚΛΕΥΜΑΤΡΑΣ

μη μοι πειν φερεθ' ὡδε μάτην πέποται γὰρ ὅτ' ἐζῶν
 μηδὲ φαγεῖν ἄρκεϊ φλήνα φόν ἐστι ταδε.
 εἰ δ' ἐνεκεν μνήμης τι καὶ ὦν ἐβίωσα σὺν ὑμῖν
 ἢ κρόκον ἢ λιβύρους δῶρα φέρεσθε, φίλοι,
 τοῖς μ' ὑποδεξαμένοις ἀντάξια ταῦτα δίδοντες
 ταῦτ' ἐνέρων ζώντων δ' οὐδὲν ἔχουσι νεκροί.

Κλευμάτρας.

2. Above a window in the church of Μεγάλη Παναγία (near the inscr. given in *I.G.I.* iii. 211). Large letters, upside down.

ΚΑΙ ΤΩ ΔΑΜΩΙ

In the inscription *I.G.I.* iii. 168, the reading in line 6 should be ΤΕΙΜΑΣΜΑ *τείμασμα* not *τέλεσμα*.

W. H. D. ROUSE

THE ROCK-CUT STATUE NEAR MANISSA.

WITH reference to the controversy as to whether the rock-cut figure known as the Buyuk Tash (or Surat Tash) on Mount Sipylus is to be identified with the statue of the Mother of the Gods, or the weeping stone Niobe which are mentioned by Pausanias, I think the following might be worth recording.

Mons. M. G. Weber in his *Le Sipylus et Les Monuments* (1880, p. 117) has remarked that the statement of Pausanias (viii. 2.), that it was asserted that the Niobe wept in Summer, furnishes an argument against the identification of the Niobe with the Tash Souret, since in summer there is no water on that part of the mountain, and even in winter the figure 'ne reçoit que les eaux immédiates de la pluie. Il faut décidément chercher Niobe dans l'intérieur du massif qui cache certainement encore plus d'un monument préhistorique.'

This conclusion was adopted and enlarged upon by Messrs. Perrot and Chipiez in their *History of Art in Sardinia, Judaea, Syria, and Asia Minor* (English translation, ii. 236), and other writers.

When I visited Manissa last January (1905) and climbed up to the figure over the frost-bound track, I found that two icicles, each perhaps three feet long, hung from the brow and chin, giving to the figure a realistic appearance of 'being immersed in grief and dissolved in tears.' As few travellers visit this place in winter, I doubt if this remarkable effect has been noted.

H. S. COWPER.

NOTICES OF BOOKS.

Bacchylides: the Poems and Fragments. Edited with introduction, notes, and prose translation, by SIR RICHARD C. JEBB. Pp. xviii + 524. Three plates. Cambridge: University Press, 1905. 15s. net.

Sir Richard Jebb's edition of Bacchylides, published only a few weeks before his unexpected and lamented death, though not so great a monument of interpretative scholarship as his Sophocles, is yet a characteristic example of his fine and thorough workmanship. The present notice can only describe its contents, without attempting to criticise. The introduction, of 146 pages, deals with (i) the life of Bacchylides, (ii) his place in the history of Greek lyric poetry, (iii) his characteristics as a poet, (iv) his dialect and grammar, (v) his metres, and (vi) the papyrus. A seventh chapter gives an exact transcript of the papyrus in usual characters. This is followed by introductions to the odes. Then comes the text of the poems, with full critical and explanatory notes, and a prose translation *en face*, the whole occupying 166 pages. The fragments of Bacchylides not contained in the papyrus are placed next, and the volume concludes with appendices dealing with certain passages which require longer treatment than could be given in the notes, and with a vocabulary and index. Three autotype plates contain specimens of the writing of the papyrus, and some selected portions of it in which special doubt attaches to the reading. The commentary notices very fully the work of other scholars, and the alternative readings and interpretations which have at any time been put forward, so that the student has all the materials for forming his own judgment, in addition to the advantage of Jebb's guidance. It is satisfactory to know that the volume was in all respects finished before Sir R. Jebb started on the journey to South Africa which ended so fatally.

Buccolici Graeci: recensit et emendavit VINCENZIUS DE WILAMOWITZ-MOELLENDORFF
[Scriptorum Classiceorum Bibliotheca Oxoniensis]. Pp. iv + 170. Oxford: University Press, 1906. 3s.

Die Textgeschichte der Griechischen Bukoliker. By the same.

The edition of the poems which pass under the names of Theocritus, Moschus, and Bion, contributed by Prof. V. de Wilamowitz-Moellendorf to the Oxford series of classical texts, involves more anxiety of treatment, and is a more important contribution to the criticism of the authors concerned, than is usually possible in such editions. The common order of the poems is abandoned (though the old numbers are retained in brackets); following the example of Ahrens, Wilamowitz prints first the poems which he regards as genuine, substantially in the order in which they stand in the best MS. K (1, 7, 3-6, 8-14, 2, 15, 17, 16, 18, with the addition of 24, 22, 28-30, and 24 epigrams, which are not in K), while an appendix contains the *Epitaphion Bionis*, the two poems (Theocr. 25 and Mosch. 4) contained in MSS. of both the families in which these *Adlocuta* are preserved, two (Theocr. 26 and 27) found in MSS. of the H family, eight (Theocr. 20, 21, Mosch. 2 Theocr. 19,

Bion 1, the *In Adonia Mortuum*, Theoc. 23, Bion 2) found in MSS. of the * family, and the *Europa* of Moschus, which is found separately. To these are added the fragments of Bion and Moschus, the *Technopaignia*, and Latin arguments to all the poems. The arguments for this arrangement, and the textual history of the poems, are set forth in the German treatise which has appeared as a companion to the Oxford volume; a brief summary of them is given in the preface to the latter. The textual apparatus is on the scale usual in this series; more extended discussions of some of the readings will be found in the dissertation.

Griechische Papyri medizinischen und naturwissenschaftlichen Inhalts. Bearbeitet von K. KALBEKISCH und H. SCHÖNZ. (*Berliner Klassikertexte*, Heft III.) Pp. 40. 9 Plates. Berlin: Weidmann, 1905.

The third part of the Berlin series of classical texts from Greek papyri includes a number of medical and literary fragments, as follows: (1) fragments of the pseudo-Hippocratic epistles, from two papyri, containing portions of Ep. 3, 4 (shorter form), 5 (both forms), and 11; (2) several fragments of a physiological treatise, dealing with the nerves, by an unknown writer of later date than Herophilus; (3) small fragment on the treatment of constipation; (4) medical treatise, including an extract from Archibius on the subject of medical education; (5) fragment, perhaps on natural history, including a reference to a commentary of Apollonius Rhodius on Antimachus; (6) small fragment on medicine, apparently of the empirical school; (7) instructions for the preparation of lard; (8) and (9) medical receipts. An index of words is appended, and photographs of the original MSS.

Mélanges Nicole: Recueil de mémoires de philologie classique et d'archéologie, offerts à Jules NICOLE, Professeur à l'Université de Genève, à l'occasion du 25^e anniversaire de son professorat. Pp. 671. Portrait and 20 plates. Genève: W. Kündig et fils, 1905. Price 30 f.

The handsome volume published in honour of Prof. Jules Nicole contains contributions from no less than sixty scholars of all countries, including Blas, Cavvadias, Dörpfeld, Duchesne, Furtwängler, Herwerden, Mahaffy, Maspero, S. Reinach, Robert, Tyrrell, Vitelli, and Weil. As is natural in a volume offered to an eminent editor of Greek papyri, many of the articles publish or comment on papyrus texts: such are the contributions of Comparotti, Crusius and Gerhart, Goodspeed, Gradenwitz, Schubert and Vitelli, Grenfell and Hunt, Jonguet and Lefebvre, Mahaffy, Mitteis, T. Reinach, Wessely, and Wilcken. Prof. Naville describes (with a photograph) the XIth Dynasty temple discovered by himself and Mr. Hall at Deir-el-Bahari, unfortunately too soon to be able to mention the remarkable Hathor-shrine, with the intact statue of the cow-goddess, which has been the sensation of this season's work. Archaeological articles are contributed by Cagnat, Cavvadias, Dörpfeld (on cremation and burial in ancient Greece), Furtwängler (a Messapian vase), Löwy, Milliet, Georges Nicole, Pottier (the Naples bronze of Alexander on horseback), S. Reinach (a Ganymede of the school of Praxiteles), Tsountas, and Zanghella. Prof. van Herwerden makes some additions to his *Latium Genesini supplementum*. The remaining articles are mostly of a literary character. Two graceful Greek poems, by Tyrrell and Mahaffy, are prefixed. The contents of such a volume are too varied and extensive to admit of review, but it is evident that there is material for classical students of all kinds, and that some of the first scholars and archaeologists of Europe have joined to do honour to their Swiss colleague.

A Chapter in the History of Annotation, being Scholia Aristophanica, Vol. III. By W. G. RUTHERFORD, formerly Head-Master of Westminster. Pp. xi+494. London: Macmillan & Co. 25s. net.

The third volume of Dr. Rutherford's edition of the Scholia in the Codex Ravennas of Aristophanes has an independent title and an independent right to existence as a contribution to the history of scholarship. In substance it is a classification of the scholia under several heads, according as they relate to textual criticism or interpretation, and according as the interpretation deals with the manner in which the verses should be spoken, or the explanation of their form or meaning. Under this last category come the scholia which interpret the poet's phrases as examples of the various tropes or figures (such as *periphrasis*, *metonymy*, *synecdoche*, and the like), those which explain unfamiliar words or matters of fact, and those which pass critical judgement on the poems. Unfortunately these two last sections form the least part of the scholiasts' industry, and in many cases give nothing more than can be readily extracted from the text itself. Dr. Rutherford ends with the meekest possible opinion of the scholia and the scholiasts, but his book is enlivened and enriched by a series of forcible pictures of the conditions under which they came into being. He does not attempt to assign known authors to the scholia, regarding them rather as mere schoolmasters' annotations, but he tries to depict the circumstances under which they arose, and he scatters hints which have an obvious bearing upon the educational questions of our own time.

Handbook of Homeric Study. By HENRY BROWNE, S.J., M.A., New College, Oxford; Professor of Greek at University College, Dublin. Pp. xvi+333. 22 Plates. London: Longmans. 6s. net.

This is a handbook to the Homeric poems, intended for somewhat advanced students of the subject. As compared with Sir R. Jebb's well-known *Introduction*, it deals somewhat less fully with the literary side of the subject, but much more fully with the archaeological side, on which so much light has been thrown by recent discoveries. With regard to the composition of the *Iliad*, Prof. Browne follows Geddes' views in the main; on the ethnological question, he is not disposed to accept Prof. Ridgeway's theories to their full extent. The value of the book, however, consists less in the actual conclusions at which the author somewhat tentatively arrives than in his fair and careful statements of the views held by the leading scholars on the chief points of controversy. M. Vissier Bérard's elucidations of the *Odyssey*, Mr. Arthur Evans' discoveries at Knossos, the British School's excavations at Phylakopi, Prof. Ridgeway's Cretan-Achaean theory—in short, all the most recent contributions to the literary and archaeological study of the poems are dispassionately stated and considered; and, in addition, Prof. Browne has the advantage of using unpublished materials of Mr. Myers, whose command of the whole field of Homeric and Mycenaean archaeology it would be hard to rival.

An Introduction to Greek Epigraphy. Part II. The Inscriptions of Attica. Edited by E. S. Rieu and E. A. Gardner. Cambridge: University Press, 1905. Pp. xxiv+601.

This volume, which carries out for Attic inscriptions the plan proposed in its predecessor, is, it would appear from the preface, not to be followed by others covering the inscriptions of other parts of Greece. This is to be regretted, because the non-Attic side of history and archaeology always runs a risk of being neglected. Possibly, however, as the editors hope, others may be induced to carry on the plan of the book; meanwhile we must be content with what we have. In method, the work is more or less intermediate between those of Dittenberger and Hicks. The object of Dittenberger's invaluable work seems to be to

produce not an epigraphist proper—i.e. one who works from the stone—but a book-epigraphist, a scholar who having the extant letters before him can make the most of them from the historical and philological point of view. The object of Hicks is not to produce an epigraphist at all, but merely to supply epigraphic illustrations of Greek history. Messrs Roberts and Gardner, while they deal within certain limits with all sorts of inscriptions, do not aim at giving a definitive publication of each inscription, but merely take it as typical of a class and attempt to make it the foundation of a study of the others. In a text-book, given a certain modicum of sound matter, arrangement is everything. The matter here is of course good and plentiful (we have 410 inscriptions divided into thirteen classes). There is, however, some lack of clearness in the arrangement: the way in which the 'Remarks' are scattered about the various sections, instead of being collected at the beginning of each, is disturbing. As regards the method of printing the inscriptions, a good feature is the disposing of the lines according to the original; but a somewhat unnecessary complication is introduced by printing restorations in Clarendon type as well as brackets. A special form should have been adopted for the rough breathing; the plan followed here to indicate the existence of the sign of the breathing on the original does not work for words which are printed with a capital initial, such as *Ἀλακκωσέως*. And we can see no reason why *φ* and *χ* should not be preserved in the transliteration when the double letters are so written on the stone. When a book has been twice the Horatian period of years in preparation—for we presume that it was taken in hand after the publication of Vol. 1, and delayed for various reasons—it is inevitable that faults of detail should creep in: we note, for instance, that the debt of the people of Syra (No. 122^{ab}) is given as 4800 drachma, whereas other editors all give 4900 (they may be wrong, but the point should have been noted); that in No. 359 the words *Ἐς Αἰγύπτου Τελεσίκοκ μάρτυς* are stated to be part of the later addition to the stone, which does not seem to be the case; that in No. 97^{ab} the weight of the 'gold tetradrachm' is wrongly said to be too high in proportion for a gold cast of a silver tetradrachm, whereas it is as nearly as possible right; that *ἐκδοσέως* is read instead of *ἐκδομένης* in 13^a and in the restored passage in 12^a. These are of course minutiae, but they are the kind of points in which the epigraphist of the new school prides himself on being correct. One or two inscriptions are omitted which we should have liked to see included: such are the commercial treaty with Phaselis (Dittenberger 272); the fragment of the confiscation list relating to Alcibiades (which is mentioned in the notes); and the inscription relating to the return of the democrats from Phyle; the last is also interesting because it contains the names of professions, which, as the editors note on No. 222, are too rare in Attic epigraphy. It is easy, however, to find fault with a book which deals with a subject of this kind; it would be ungrateful to disguise the fact that as a summary of the portion of the Corpus relating to Attic inscriptions it will be invaluable to teachers and students of all degrees.

A Handbook of Greek Sculpture. By E. A. GARDNER. Revised Edition.
Pp. xxxii + 590. London: Macmillan & Co., 1905. 10s.

In the revised edition of Mr. E. A. Gardner's well-known handbook, the former first and second parts have been combined into a single volume. The changes in the text are restricted to the insertion or modification of occasional sentences, a discussion of the most important discoveries of the last ten years being reserved for an appendix of 35 pages. This can also be purchased separately, by those who possess the former edition, which, it should be noted, is greatly to be preferred as far as regards the illustrations.

Studies in Ancient Furniture. By CAROLINE L. RANSOM. 12 in. x 9 in. Pp. 128 + 30 plates. Chicago: The University Press, 1905. \$4.50 n.

The sub-title of this work—*Couches and Beds of the Greeks, Etruscans, and Romans*—accurately describes its scope and contents. Miss Ransom has made an exhaustive study of her subject, giving a chronological 'Survey of Forms,' a discussion on 'Styles,' and a description of the materials used in making and furnishing the beds; she has also added a glossary of technical terms and very complete bibliography and indices. The volume is copiously illustrated and should be useful to students, but it may be well to note for their guidance that the bronze fulcrum ornament figured on Plate XIV. γ has been withdrawn from exhibition by the authorities of the British Museum.

Supplementary Papers of the American School of Classical Studies in Rome. Vol. I. Pp. viii + 220. With 18 plates and 76 blocks in text. New York: Macmillan Company, 1905.

This is the first volume of an occasional publication, which is designed to receive papers of the American School at Rome, which are deemed unsuitable, for one reason or another, for the *American Journal of Archaeology*, the usual organ of the Archaeological Institute of America.

The volume opens with an elaborate study by Messrs. Pfeiffer, Van Buren, and Armstrong, of the brick stamps, found in a short length of the Aurelian Wall at Rome, which collapsed after a storm of rain, in the Autumn of 1902. Other papers deal with questions of topography of the Campagna, Greek and Christian sculpture, the text of Columella, and the chronology of the reign of Julian. A paper on the mounds and other remains of Turkestan by the Director, Mr. Richard Norton, is also included, but its appropriateness is open to question.

Catalogue of Greek Coins in the Hunterian Collection, University of Glasgow. Vol. III. Further Asia, Northern Africa, Western Europe. By GEORGE MACDONALD. Glasgow: Maclehose, 1905. Pp. viii + 800. With 30 plates.

This great work—great not merely in bulk and weight—has been brought to a conclusion, and we should have only congratulations for the author, the publisher, and the University of Glasgow, were it not that Mr. James Stevenson, by whose munificence the undertaking was made possible, has not lived to see its completion. In every way this volume is an improvement on its predecessors; carefully compiled as they were, they contained fewer additions to the science of the subject, apart from the publication of fresh material, than are to be found in this third volume. A careful study of the Seleucid series has enabled Mr. Macdonald to improve considerably on the classification; in the same way he has made somewhat clearer the arrangement of the Alexandrian, Cyrenaic, and Carthaginian coins. It is unfortunate that the Bactrian series was unrepresented in Hunter's cabinet, for Mr. Macdonald would perhaps have been able to diffuse some light in this dark corner of numismatics. The fine Roman collection at Glasgow will, we fear, remain uncatalogued, unless the University can be induced to fill the gap created by Mr. Macdonald's removal to another sphere of work, and unless another Mr. Stevenson can be found to subsidize the publication.

Coin-Types, their Origin and Development. By GEORGE MACDONALD.
Glasgow: Maclehose, 1905. Pp. x+275. With 16 plates.

This volume represents a course of Rhind lectures which were delivered by Mr. Macdonald to a popular audience; but although they are so written as to be intelligible and interesting to anyone having a slight acquaintance with the Classics, they are entirely free from the slovenliness which characterizes most popular books dealing in the archaeological subjects. There is not a little in the book which the most experienced and learned numismatist will find useful and enlightening; while, as for the beginner in classical archaeology—not merely in numismatics—we can conceive of no better book to put into his hands. The title expresses the contents of the book very well. The author finds the origin of the coin-type in the badge or arms of the issuing authority; the theory, though not quite new, will doubtless be associated with his name in future, for he is the first to adopt it wholeheartedly, and he has proved it as completely as a theory dealing with such a question can be proved. He is to be congratulated on the moderation and fairness with which he has conducted the necessary controversy. The rest of the volume deals with the subsequent development of the coin-type, notably with the intrusion and gradual domination of the religious element. Some space—as much as is necessary, from the point of view of the book—is devoted to Roman coins; and in the last lecture something is said of mediæval money, enough to indicate the lines on which the study of their types might be conducted. The plates and index are good.

Der Blitz in der orientalischen und griechischen Kunst. Ein formgeschichtlicher Versuch von PAUL JACOBSTHAL. Mit 4 Tafeln. Pp. vi+60. Berlin: Weidmann, 1906. Price 3 m. 60.

A very careful and full analysis of the origin and development of the form of the thunderbolt (1) in Oriental (2) in Greek art. The author's thesis is that the lightning was represented in Babylonian and Assyrian art by the same means, or a modification of the same means, as were used to represent ordinary fire, i.e. two, then three zigzag or wavy lines. The Greeks took over this idea and transformed it, conceiving the lightning as a *flower*, in harmony with a widely prevalent conception of fire and light as a flower. An Ionic and a Helladic form of the thunderbolt are distinguished, and the parts played in the development by the addition of wings and the conception of the thunderbolt as a weapon are discussed. The thesis may be true, but its weak point is in the difficulty of proving that the representation of the thunderbolt by flower-like forms corresponded to a conscious idea of flame as flower; how far may it not have been due to a purely decorative instinct?

Phéniciens et Grecs en Italie d'après l'Odyssée. By P. CRANPAULT. Pp. 602.
With Map. Paris: E. Leroux, 1906.

This is a work written in opposition to M. Bérard, to show that Phaeacia was Ithia, and the Phaeacians a mixture of Phoenicians and Euboean Greeks. It is described by its author as a 'Geographical, historical and social study, on a New Method'; but the method is a very old one. It consists in taking the text of the *Odyssey* and ratiocinating upon it by the light of nature, without admitting any non-literary evidence. Of the archaeology of the Homeric and pre-Homeric ages the author makes no mention whatever. His lucubrations are often highly ingenious. He explains the portents, which marked Odysseus' arrival in Phaeacia, by volcanic phenomena of the most startling kind; he works Ithian topography into the Homeric by the aid of geology and seismology; he finds a matriarchate of Phoenician type in full force in Phaeacia; he brings the 'divine Homer' himself to Ithia, one fine day in the ninth century, 'dans les bagages d'un convoi

gree,' and persuades himself that Isehn and Scheria are identical names. Of course everything in the careful topographical work, which the poet proceeded to write on the spot in order to curry favour with the Phaeacian-Phoenicians, fits M. Champault's theories à merveille; and there are no discrepancies at all—a result eminently satisfactory to M. Champault.

Greece: from the Coming of the Hellenes to A.D. 14. [The Story of the Nations.] By E. S. SHUCKSBURY. Pp. xix+418. Illustrated. London: T. Fisher Unwin, 1903.

By way of apology for the appearance of another short history of Greece, the author of this book points out that it is necessary to the completion of 'The Story of the Nations' Series, to which it belongs, and further, that it serves as an introduction to a future volume on The History of Greece subsequent to A.D. 14. The work has, however, a distinct value of its own, being an excellent and up-to-date summary of Greek History, Art, and Literature, written by an experienced scholar. It should be a boon to those who have not the leisure for prolonged study, and yet wish to know something of the results of recent research. The illustrations are good and, as a rule, well chosen. The least satisfactory feature of the book is the number of misprints, which ought not to be nearly so frequent as they are.

Beiträge zur Griechischen Rechtsgeschichte. Von HEINRICH SWOBODA. Weimar: Hermann Bohlens Nachfolger, 1903.

It is no easy matter to disengage what is new in Prof. Swoboda's first essay (pp. 1-42, *Kritisches zur Achtung*), a development of his article on the case of Arthurius of Zela in *Archäol.-epigraph. Mitteilungen aus Österreich-Ungarn* xvi. 1893, pp. 49 sqq., and at the same time a criticism of a recent work by P. Usari (*Achtung und Verbannung im griechischen Rechte*, Berlin, Weidmann, 1903). In the Greek world outlawry seems to have gone out of use after the fourth century B.C., and no tolerable history of the early stages of the practice can be made out, not even at Athens. With regard to legal terminology Prof. Swoboda argues that originally, i.e. in the pre-Solonian epoch, the Athenian formula was *ἀνὴρ ἴστω*, or *will angeblich (narratively) sein*, equivalent in sense to *ἀνὴρ τεθνήσκω*, or *will ohne Base, ohne Erbschaft, sterben*, which occurred in Dracon's laws, but, that, when *ἀνὴρ* acquired its later meaning of whole or partial loss of civic rights, *capitis deminutio*, other phrases became necessary, e.g. first *ἀνὴρ καὶ πολέμιος ἴστω*, and at last simply *πολέμιος ἴστω*. The sentence *ἀνὴρ ἴστω* was a special form introduced in the Athenian empire in the fifth century, under which the person outlawed had to be surrendered for punishment to the authorities of the State which had outlawed him. The nature and conditions of the punishment are examined with reference to the ancient laws of Germany and Scandinavia, the principal difference noted being that in Greece the penalty was not inflicted for offences against private individuals, but only for what we should call political crimes, in particular attempts to overthrow the constitution and various forms of high treason. Sentence of outlawry was passed in democracies by the Assembly, among the Macedonians by the army. An appendix discusses among other things the fate of Themistocles, and of Demosthenes and the other orators in 322 B.C. It is maintained that they were not outlawed but condemned to death by the Assembly in *contumaciam* on an *εἰσαγγελία*. The second and longer essay (pp. 42-132, *Ueber die altgriechische Schuldmachtenschaft*) deals principally with the social and economic conditions of Attica in the age of Solon, and will encounter lively opposition. Starting from the code of Gortyn, and making free use of dubious analogies drawn from early Roman history the author contrasts the condition of the *ἀντοκτῆρες*, *νέκτι*, debtors who had voluntarily pledged their persons, with the condition of the *ἐντοκτῆρες*, *δικατοὶ*, judgment-debtors, whom creditors had the right to sell into slavery outside Attica. In the next place he distinguishes both these classes from the

ἀσκήσαντες, who are compared with Roman *clientes* and defined as serfs bound to the soil and paying to their lords annually one-sixth of the gross produce of the land which they cultivated. Solon is made out a violent revolutionary, who not only abolished the ancient law of debt, but cancelled all existing debts indiscriminately, not only swept away the status of serfdom, but gave to the former serfs the freehold of the ground which they tilled. That this view of Solon is diametrically opposed to the opinion of antiquity is not considered a fatal objection by Prof. Swoboda. He thinks the evidence bad and treats with especial severity the account given in Aristotle's *Constitution of Athens*.

Geschichte der lateinischen Kaiserreiche von Konstantinopel. By ERNST GERLAND. Part I. Svo. Pp. 264. Homburg v. d. Höhe: Gerland, 1905. 6 m. 50.

This volume contains the first portion of a history of the Latin Empire of Constantinople, which is itself to form part of a general history of the Frank dominion in the Greek world. The story begins just after the capture of Constantinople by the Crusaders (A.D. 1204), and we have a detailed account of the reigns (A.D. 1240-1216) of the first two Latin Emperors, Baldwin I., Count of Flanders, and his brother Henry. Gerland is already favourably known for his writings connected with the Franks in Greece, and the present instalment of his work will be welcome to all who are interested in mediæval Greece and in the general interplay of influence between Eastern and Western civilization. The narrative is clear and graphic, and the references to authorities are much fuller and more exhaustive than in any previous book on the same topics. The statesmanlike character of Henry has not, says Gerland, been hitherto sufficiently recognized: 'seine Institutionen haben die Grundlage gegeben, auf der sich die Frankenherrschaft in Griechenland weiter entwickelt hat.' The author no doubt reserves for the conclusion of his history of the Latin Emperors some general summing-up of the world-wide consequences of this startling irruption of Feudal lord, Venetian trader, and Latin ecclesiastic into the ancient domain of the Eastern Empire.

Macedonia: its Races and their Future. By H. N. BRAILSFORD. Pp. xx+340. Maps and illustrations. London: Methuen & Co., 1905.

This is an account of Macedonia as it is since the insurrectionary movements of 1903-4, written by a leading member of the Committee, who superintended the distribution of relief on the spot. Mr. Brailsford had had intimate relations with Greeks previously, both during the war of 1897 and the latter stages of the Cretan rising; but in spite of that (perhaps, even, because of it), he makes short work of Greek pretensions to Central Macedonia. He shows himself well equipped so far as knowledge goes both of the ancient and the modern history of the region, and, on the whole, fair-minded. In fact it takes either ignorance or prejudice to find a peasant people, which has a claim to be called Greek in any but an official ecclesiastical sense, north of the Monastir railway. Mr. Brailsford has little difficulty in demonstrating that the Central Macedonians were not Greek in the time either of the Macedonian Kings or the Greek Emperors of Constantinople—the only two epochs in which it is any use to prove their national unity with Hellas. The author's essay-like treatment of the divers races and churches inevitably suggests comparison with another book, that of 'Odysseus'; but he handles his subjects well, and will reach an audience that has never read *Turkey in Europe*. He tries hard to give the Turk his due and often succeeds, and his personal knowledge of affairs, like that of Smerdash, makes him a valuable witness: but he might bear in mind more constantly that the programmes of reform, communicated by sophisticated *Komitajds* to interested Europeans, are always suspect, and that the desire of place and salary plays a large part in Balkan patriotism.

The Dioscouri in the Christian Legends. By J. RENDEL HARRIS. Pp. 64. 8vo. London: C. J. Clay and Sons, 1903.

An interesting and ingenious little study of certain twin-saints of the Greek Calendar who seem to be connected with the Dioscouri. These saints are chiefly Flornus and Laurus, Protasius and Gervasius, Kastoules and Polyencius, and their festivals generally fall on or near the 18th or 19th of the month. It is also suggested that the writer of the Acts of Judas Thomas (i.e. the Apostle St. Thomas of Edessa, the twin-brother of the Lord) worked upon the legends of the Great Twin Brethren. The argument as to the star and crescent on the regal tiara on coins of Edessa is perhaps pressed too far, as a star or crescent are common ornaments on the tiaras (shewn on coins) of the Kings of Armenia, Persia, and Parthia. It may be added that apart from the evidence of identification in the particular cases examined by Rendel Harris, he is able to adduce the general testimony of Dion Chrysostom as to the long surviving belief in the Dioscouri: *Κάστωρ καὶ Πολυδεύκης οἱ Διὸς παῖδες ἐμπροσθεν καὶ θεοὶ μέχρι τῶν πᾶσι δοκῶσι διὰ τῆς ἀδελφότητος ἣς τότε ἔσχον.* (Orat. lxi. 11).

Die Antike und Wir. Lectures by TH. ZIELINSKI. Translated from the Russian into German by E. SCHÖLSEN. 8vo. Pp. 126. Leipzig: Dieterich, 1905. 2 m. 40.

A course of eight lectures delivered to the senior boys of the schools of St. Petersburg, on the relations of classical study to modern education and culture. The first four lectures deal with the educational value of Greek and Latin. The second four deal with the importance of antiquity as an element in modern religion, philosophy, literature, and art. The book is chiefly interesting to an English reader as treating of a familiar subject viewed from a distinctively Russian standpoint.

The following recently published books, among others, have also been received —

The Museums and Ruins of Rome. By W. AMELUNG and H. HOLTZINGER. English ed., revised by the authors and Mrs. S. A. STRONG. Vol. I. Pp. xxiv+328, with 170 illustrations; Vol. II. Pp. xii+183, with 96 illustrations and map. London: Duckworth, 1906.

Anaximenes von Lampsakos. Studien zur Ältesten Geschichte der Rhetorik. [Festschr. f. d. xlviii. Versamml. deutsch. Philol. u. Schulm. in Hamburg.] By PAUL WENGLAND. Pp. 104. Berlin: Weidmann, 1905. 2 m. 80.

Aristotle's Theory of Conduct. By THOMAS MARSHALL. Pp. xxi+578. London: Fisher Unwin, 1906.

Greek Theories of Elementary Cognition, from Alcmaeon to Aristotle. By J. I. BEARE. Pp. vii+354. Oxford: University Press, 1906. 12s. 6d. net.

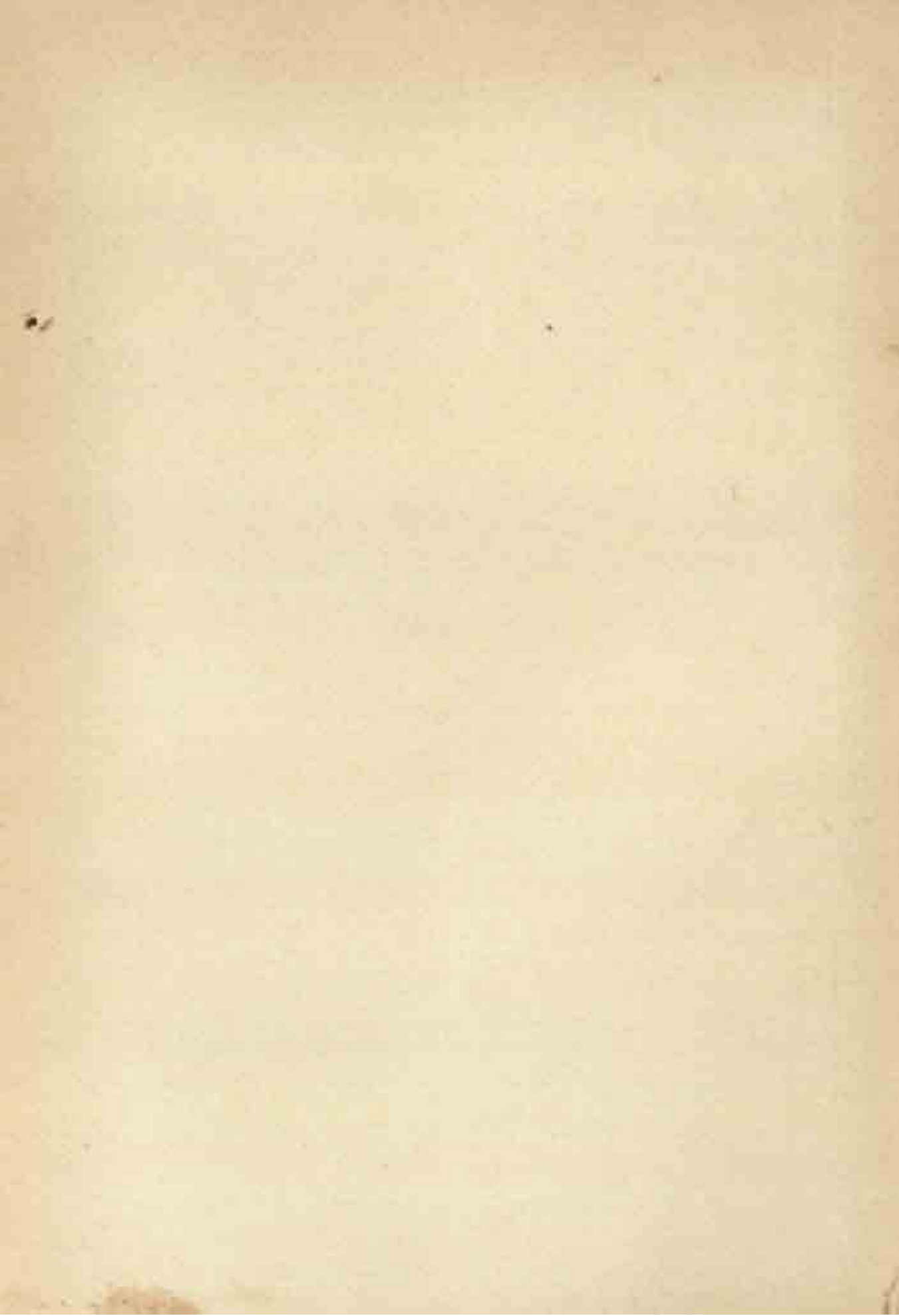
Les Phéniciens et l'Odyssée. By VICTOR BÉHARD. Tome II. Pp. 630. 144 maps and illustrations. Paris: Colin, 1903. 25 f.

Recent Excavations in the Roman Forum. By E. BURTON BROWN. Second ed. Pp. xvi+227. Illustrations and Plans. London: Murray, 1905.

Heinrich Brunn's Kleine Schriften, gesammelt von HERMANN BRUNN und HERMANN BULKE. Vol. I. Pp. xi+277, with portrait and 65 illustrations; Vol. II. Pp. 532, with plate and 60 illustrations. Vol. III. Pp. viii+356, with portrait and 53 illustrations. Berlin and Leipzig: Teubner, 1905, 1906.

Comptes rendus du Congrès International d'Archéologie. Pp. 398. With Frontispiece and 33 illustrations. Athens: Meissner & Kargadouris, 1906.

- A Catalogue of Zodiacs and Planispheres**, originals and copies, ancient and modern, extant and non-extant, from B.C. 1329 to A.D. 1900. By A. B. GRIMALDI. Pp. viii+176. London: Gall & Inglis, 1905.
- The Temple of Deir el Bahari**. Part V. By E. NAVILLE. Pp. vii+12. Plates cxix-cl. London: Egypt Exploration Fund, 1906.
- Platonis Opera**. Recogn. J. BURSER. Insunt Clitopho, Timaeus, Critias seorsum impressi a Tomo Quarto. [Script. Class. Bibl. Oxon.] Oxford: Clarendon Press, 1905.
- Index Verborum Propertianus**. By J. S. PHILLIMORE. Pp. 111. Oxford: Clarendon Press, 1906. 4s. 6d. net.
- Architecture East and West**. By R. PHENÉ SPIERA. Pp. xviii+269. 116 illustrations. London: Batsford, 1905.
- Primitive Athens as described by Thucydides**. By J. E. HARRISON. Pp. xii+168. With Frontispiece and 49 illustrations. Cambridge: University Press, 1906.
- A Catalogue of the Sparta Museum**. By M. N. TODD and A. J. B. WACE. Pp. viii+249. With 85 illustrations. Oxford: Clarendon Press, 1906.
- Die griechische Literatur des Altertums**. By U. VON WILAMOWITZ-MÖLLENDORFF. [Die Kultur der Gegenwart, herausg. von Hinneberg.] Pp. 236. Berlin and Leipzig: Teubner, 1905.
- Xenophontis Respublica Lacedaemoniorum**. Ed. GINUS FIERLEONI. Pp. v+62. Berlin: Weidmann, 1905. 1 m. 80.



THE MODERN CARNIVAL IN THRACE AND THE CULT OF DIONYSUS.

My attention was called recently to an account by G. M. Vizyenos¹ of a Carnival festival celebrated in the district about Viza (ancient Βιζύη) in Thrace, so remarkable that it seemed worth while to verify the author's account by a personal visit. This I was able to do at the Carnival of 1906, and the account below has been drawn up from my notes, supplemented by this article, from which I quote everything of value.

Of the writer's good faith there is no doubt, and of almost all the points he mentions I had ocular confirmation. He was a native, not of Haghios Gheorghios, the village whose festival he describes, but of Viza itself, the chief place in the district, lying some two hours to the west. He left his native place while still a boy, and died at Athens in 1896, aged forty-two. The middle part of his life he spent in Germany, and he does not seem ever to have returned to Thrace.² His account is therefore probably a description of the festival as it was in his youth some forty years ago, when modern conditions had affected the district even less than at present. He calls it *Οἱ Καλόγεροι, καὶ ἡ Λατρεία τοῦ Διονύσου ἐν Θράκῃ*, and makes as many classical comparisons as possible. All these I have omitted, and drawn upon him only for matters of fact.

The town of Viza lies on and around the Acropolis of the ancient city, and some eight hours by road north of the station of Tcherkesskeui on the railway between Constantinople and Adrianople, and nine hours from Midheia (Salmydessus) on the Black Sea. It is built on the last slopes of the low hills that shut off the view of the sea, where these rise from the wide plain of Thrace. This is watered by the tributary streams of the Tearus, said to be exactly the thirty-eight reckoned by Herodotus, and is studded with conspicuous tumuli, of the same shape but generally rather larger than those on the English downs. They are said to contain the bones of men and horses, and the iron and bronze fittings of a chariot have been found in

¹ In the first and only number published of the *Θρηακὴ Ἑστέρσις*, ἑτήσιος ἑκδοτικῆς τῆς ἐν Ἀθήναις Θρηακῆς Ἀδελφότητος, Athens, 1897, to which my attention was first called by

U.S.—VOL. XXVI.

Mr. F. W. Hasluck.

² Details of his life are given in a book on the district, *ἱστορία τῆς Βιζύης καὶ τῆς Μιδείας*, ἐκ τῆς Ζαββᾶ & Αἰνίου, Constantinople, 1890.

such a tumulus, and are now in the Museum at Sofia.² In date they hardly seem to be earlier than the beginning of our era, and many of them are a good deal later. A fair number of inscriptions are preserved in the modern town, four of which record names of kings and dynasts of Thrace, whose palace was at Viza.³ The most conspicuous remains of this period are the fine walls (Fig. 1) that still stand on the western and southern sides of the Acropolis, now the Turkish quarter, and testify to its former strength. A gate, flanked by a pair of towers and surmounted by a quadriga, is represented on two coins of Hadrian. A Roman altar, a base sculptured with cupids supporting garlands and heads of animals, and two early



FIG. 1.—THE WALLS OF VIZA.

Christian gravestones carry us further down, and the imposing church of Haghia Sophia (Fig. 2), now a mosque, shews that the place was of some importance in Byzantine times. Not far from Haghia Sophia is a conspicuous domed Byzantine building, also formerly a church, and within the Acropolis area (*Kolch*) are other less important ancient and Byzantine remains, the most interesting of which are numerous blocks which once formed the seats of a theatre, and a large vaulted structure of the Byzantine age, to which also belong several fine military towers. Viza is now a town of 3,500 inhabitants, of whom 2,500 are Greeks and 1,000 Turks, and the seat of a bishop and a Kaimakam.

² *B.C.H.* xiv, 1901, pp. 156-220.

³ To be published in *B.S.A.* xii.

In all the knot of Christian villages, of which Viza is the centre, the festival in question is celebrated annually on Cheese Monday (*Τυρομή Δευτέρα*). This day begins the last week of Carnival, which culminates on the following Sunday (*Κυριακή τοῦ Τυροφαγίου*). Lent then begins with Pure Monday (*Καθαρά Δευτέρα*), when not only meat, as during Carnival, but also all kinds of animal food except bloodless molluscs are forbidden.

The masquerade of this day was, even when Vizyenos saw it, no longer kept up in its fulness at Viza itself, but only in the neighbouring villages, of which he takes Haghljos Gheorghios (Turkish, Evrenli) as an example. At this village I also spent Cheese Monday, and during my stay of a week in



FIG. 2.—CHURCH OF HAGIA SOPHIA, VIZA, FROM SOUTH-EAST.

the district was able to supplement my notes by enquiries about the observances in other places.

The list of masqueraders is as follows:—

I. Two *καλογέροι* (Figs. 6, 7 and 8), who play the principal parts. Their disguise consists of a headdress formed of an entire goatskin without the horns, stuffed out with hay so as to rise like a great shako at least a foot or eighteen inches above the head, and adorned at the top with a piece of red ribbon. The skin falls over the face and neck, forming thus a mask, with holes cut for the eyes and mouth. Round the waist three or four sheep-bells are tied, and their hands are blackened. Their shoulders are monstrously

padded with hay to protect them from blows, which, from Vizyenos' account, they used to receive more freely than at present. He adds that the head-dress may be made of the skin of a fox or wolf, and that fawnskins were worn on the shoulders, and upon the legs goatskins. The essential and



FIGURE.—A KALOGEROS AT VIZA.

indispensable elements, he says, are the mask and bells. It would seem from this that the resemblance of the actor to an animal was formerly a good deal more marked than at present. A little boy whom I saw on the Tuesday at Viza acting as *Kalogheros* (Fig. 3), the only part there surviving,

wore a tall conical fur cap and bells at his waist. He had no mask, but his face as well as his hands was blackened. In one of the villages the *kalogheroi* do not wear skins at all on their heads, but beehives. One of the *kalogheroi* at Haghiōs Gheorghios carries a wooden phallus (Fig. 4c), and the other a mock bow (Fig. 4b).

This bow (*doğarı*) is in general appearance rather like a crossbow, but is made only to scatter ashes or powder, which are placed in a cow's horn fastened to the end of the moveable piece that takes the place of the arrow. Vizyenos adds that the carrier of the bow is the leader of the two, and the other his servant and follower. I could observe no difference in their importance, though I shall bring reasons below for believing that his

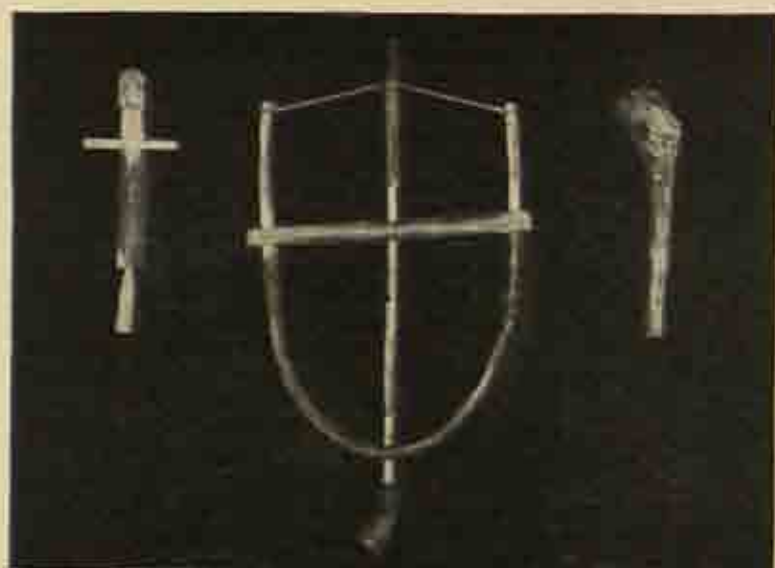


FIG. 4.—a PUPPET. b BOW. c PHALLUS.

statement that one plays only a secondary part is correct and represents a less corrupt version of the play. In the drama with which the day closes, it is the carrier of the bow who shoots the other, and in this point Vizyenos agrees with my observations; as, however, he says that the second actor is the slayer, he seems to be in self-contradictory error in assigning the bow to the leader.

II. Two boys dressed as girls (*Kopitria*), called also in some other villages, according to Vizyenos, *vúpes*, brides (Figs. 7 and 8). These wear a white skirt and apron, a peasant woman's bodice open in front, and kerchiefs binding the chin and brow. A third kerchief hangs down behind, and from beneath it escapes a corded black fringe like finely plaited hair.² They

² The fringe of a kind of woman's scarf is used for this purpose.

check any liberties with knotted handkerchiefs weighted with a few bullets.

It is to be noted that the *kalogheroi* at Hagios Gheorghios must be married men, and the *koritsia* unmarried. Vizyenos tells us also that these four actors are chosen for periods of four years and that during this time a *koritsi* may be betrothed, but must remain unmarried, a father being able to refuse to allow his son to take this part on the ground that he is thinking of getting married (*πανδρολογείται*). Of this I could learn nothing; the *kalogheroi* for 1906 had acted for more than four years, and the period seems quite unsettled. But the rule about marriage remains clearly fixed.

III. Next comes a third female character, the Babo, a word in general local use meaning an old woman. This character was not represented in the play I saw, but her place was taken by another female personage described below, the *κασιβέλα*. The Babo herself still appears at other villages and until quite recently was seen at Viza, where she has now been forbidden by the authorities. She is described by Vizyenos as a man dressed as an old woman carrying on her arm a basket containing 'some absurd object or piece of wood swaddled in rags,' which she treats as a baby. Of this child she is the *καφομάνα*, and the child (*λικνίτης*) is a seven-months child (*ἐφταμηνίτικο παιδί*) born out of lawful wedlock of a father whose name she does not know. This account there is no reason to doubt. The Babo's child, I was told at Viza, was always regarded as bastard. *Καφομάνα* I understood to mean 'nurse' or 'foster-mother,' but Vizyenos says that the Babo regards the child as her own, and kindred words⁶ make it almost certain that the real meaning is 'unmarried mother, mother of an illegitimate child.'⁷ The word *λίκνη* survives in the district, especially at Sammakón and Mítheia, meaning a cradle, made as usual of wood and shaped like a trough. Further evidence for it at Viza is supplied by its use in a local version of the song of the 'Bridge of Arta,' printed by Lakidhis, *Ίστορία τῆς Βιζύης*, p. 126.

The lines are:—

Φῆκα τὸ σπῆγι μ' ἀνοικτὸ καὶ τὰ ψωμιά 'στὸ φούρνο,
καὶ τὸ σαλό* μου τὸ παιδί 'στὸ λίκνη καὶ κοιμάται.

I have left my house open, and the bread in the oven, and my innocent child in the cradle sleeping, spoken by the mother who must leave her home to be killed and buried beneath the bridge that it may be firmly founded. *Λικνίζω* means to rock the cradle, but *λικνίτης* was explained to me as meaning, not the baby, as Vizyenos gives it, but the person who rocks the cradle. For this latter meaning the word should, however, be oxytone, and it is likely that my informant read the word wrongly, and that Vizyenos is making no error

* *Capsofija*: *Mischien*, from Dova (G. Meyer, *Nomog. Studien*, III, p. 29 and *καψαλῆ*: *ἡ κόμην τίσαν ἐν ἀλεφγκαλίαι*, from Karpathos (*Ζωγραφίαι Ἀγίου*, I, p. 323).

⁷ The meanings 'nurse' and 'unmarried

mother, mother who is not a wife' are not so far apart but that the word may bear both senses.

⁸ Lakidhis explains *σαλό* as meaning *μωρό*, 'innocent.'

in recording *λικνίτης* as a genuine local word for a baby in a cradle. In any case the use of derivatives of *λίκνον* in the sense of cradle is certain. It is only at this festival that a basket is used as a cradle, and even then not invariably. The Babo at Viza used to carry a piece of tile for this purpose. *Λικνίζω* has also its usual meaning of winnowing, and *λικνάρι* means a winnowing fork. Nowhere else in Greece have I found any evidence for these words used of baskets or cradles.⁸

IV. The *κατσιβέλοι*, or Gipsies, dressed like the Babo in miserable rags. Of these Vizyenos says there are three or four, all apparently male, though elsewhere he incidentally mentions the female *κατσιβέλα*. I saw two only, man and wife, *κατσιβέλος* and *κατσιβέλα*. (Figs 5-8.) They carried saplings some ten or twelve feet long, and their faces and hands were blackened. The *katsivelos* had no other disguise, but his wife wore a woman's coat and on the head a kerchief and a little false hair. When the actors were dressing I was told that it would be the *katsivela* who would carry the basket (*καλάθι*) and the baby, and on my asking where the basket was, he ran off and got a rough basket with a little wool in it to make a bed, and, breaking off a piece of stick, put it into the basket and nursed it, and played with it as if with a baby. When the actors began to perambulate the village, this was quickly dropped, and the carrying of the baby seems just dying out at Haghios Gheorghios, where the *katsivela* has partly taken the place of the Babo, and, as being also an old woman, occasionally her name as well. The doll shown in Fig. 4a was made for me at Viza to be exactly like the figure that the Babo there used to carry.

V. The last characters are the Policemen. These are two or three young men carrying swords and whips, with embroidered kerchiefs tied round their fezzes. One of them carried also a length of chain, for making captures. The name I heard for them was *ζανταρμάδες*, i.e. gendarmes, but Vizyenos calls them *ζαπτιέδες*, *κουρουτζήδες*, or *φύλακες*.

Lastly a man accompanies the others, playing on a bagpipe (*γκέντα γίδα*).

The masqueraders get ready in the morning and spend the day in visiting each house in the village, receiving everywhere bread, eggs, or money. The two *katocheroi* lead the crowd, knocking loudly at the doors with the bow and phallus, and with the *koritsia* generally dance a little hand-in-hand, before the housewife brings out her contribution. They are followed by the *katsirelos* and *katsivela*, who are especially privileged to scare fowls and rob nests. In general anything lying about may be seized as a pledge to be redeemed, and the *koritsia* especially carry off babies with this object, and occasionally capture a man with their handkerchiefs. A recurring feature is

⁸ I am uncertain whether the modern pronunciation does not as commonly demand *χ* in these words instead of *κ*. It certainly does in

the neighbouring district of Serinda Ekkhlires (Βάλντι, Θερρινιά, p. 13).

an obscene pantomime between the *katsivelos* and his wife on the straw-heaps in front of the houses.

By the afternoon no house was left unvisited, and everybody, men and women, gathered round the open space in front of the church at the top of the village. Here the drama proper is enacted. It began with a hand-in-hand dance of all the characters, the *zandarmathes* brandishing their drawn swords. The *kalogheroi* then withdrew, leaving the field to the gipsy smiths, the *katsivelos* and his wife. These sat on the ground facing each other, and the *katsivelos* pounded on the ground with a stone, whilst the *katsivela* lifted her skirts up and down. This is understood to be a pantomimic representation of the forging of a ploughshare, the man hammering like a blacksmith, whilst the fanning with the skirts represents the action of a pair of bellows,

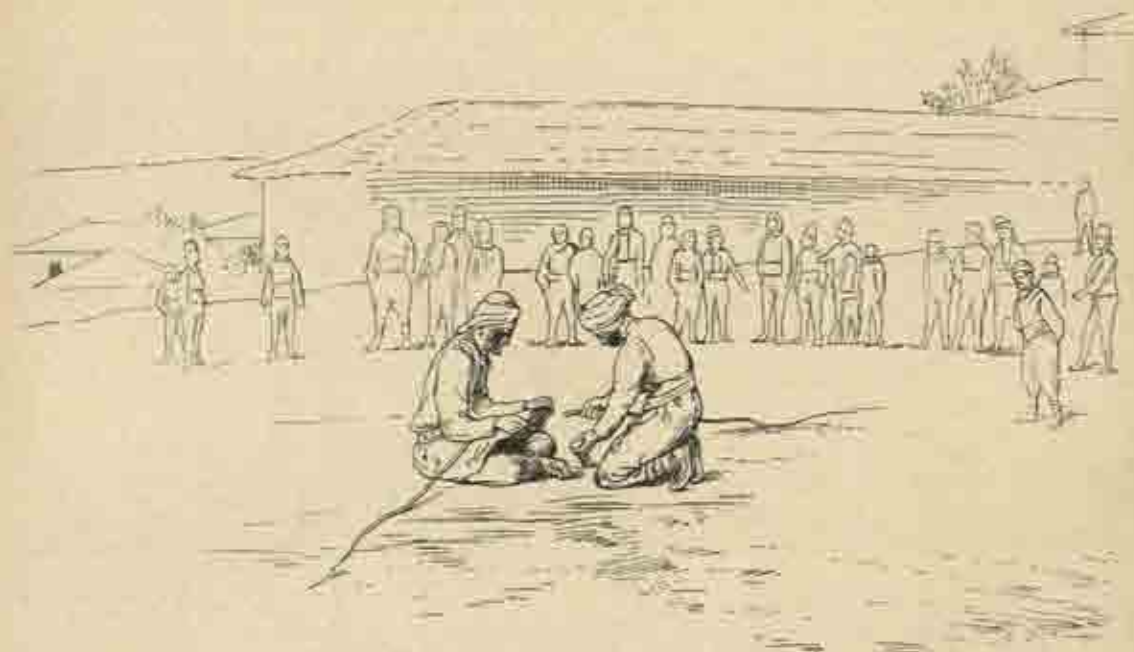


FIG. 5.—THE KATIVELAI MAKING THE PLOUGHSHARE.

and is represented in Fig. 5, in which the *katsivela* is seen pretending to work the bellows on the left, and her husband opposite. At this point, according to Vizyenos, the Babo's child begins to grow up, and she finds that *τὸ μωρὸ δὲν χωρεῖ πλέον εἰς τὸ καλάθι*, *The baby is getting too big for the basket*, and, together with a huge appetite for meat and drink, he begins to demand a wife. This, according to Vizyenos, is followed by the chief *kalogheros* pursuing one of the *koritsas* and the celebration between them of a mock marriage, parodying the Greek rite of crowning the bride and bridegroom. The part of *κουμπάρης*, or best man, is taken by the second *kalogheros*. I saw none of this, but it was understood that the *koritsas* were the wives of the *kalogheroi*, and I was informed that in the adjacent village of Dzikli such a mock

marriage is performed with old baskets instead of crowns and the burning of dirt for incense. But both there and also at Hagios Gheorghios both *kalogheroi* are married, otherwise, indeed, the presence of the second *koritsi*, except perhaps as a bridesmaid, is hard to explain. But the account of Vizyenos, as the comparison made below with the Skyros and Kosti festivals indicates, represents a clearly more primitive tradition.

Presently the first *kalogheros* was seen sauntering about, or standing the phallus upright on the ground and sitting upon it. Meanwhile his comrade was stalking him from behind and at last shot him with the bow, at which he fell down on his face as if dead. After making sure that he was really dead, the slayer traced a line round the body, as if to mark the size of the grave needed. He then pretended to flay (*γδέρω*) the dead body, using for



FIG. 5.—THE FLAYING OF THE DEAD KALOGHEROS.

the purpose a kind of pick (*chelomaji*)¹⁰ and also making a show of sharpening a stick, as if it had been a knife. A wooden knife is sometimes used. Of this flaying Vizyenos says nothing. It is represented in Fig. 6, in which the bow and phallus are lying on the ground on the left, and in the background on the right the *katsirelos* and his wife appear with their long wands. The padded back of the dead masker should be noted. Whilst the *kalogheros* is thus lying dead, one of the *koritsai* in the character of his wife laments for him with loud cries, throwing herself across the prostrate body, as is shewn in Fig. 7. The *katsirelos* and his wife also form part of the group. In this lamentation Vizyenos says that the slayer and the rest of the actors join

¹⁰ A greased beam of the Turkish *kubuk*.

making a regular parody of a Christian funeral, burning dung as incense and pretending to sing the service, and finally lifting up the corpse to carry it away. After the lamentation of the *koritsi* the dead man suddenly came alive again and got up, thus ending this part of the play.

Then the *katsivelos* and his wife repeated the forging of the ploughshare, this time hammering on a real share. At some time in the play the *katsivelos* usually rides on a donkey, but this was omitted owing to the bad weather. Snow had been falling all day, and perhaps the extreme cold tended to curtail the details of the performance. Vizyenos also mentions some rough play with a donkey, but puts it down to the *kalogheroi*. At about this point all the implements used were thrown high into the air with cries, 'Καὶ τοῦ χρόνου,' 'Next year also!'



FIG. 7.—THE DEAD KALOGHEROS LAMENTED BY HIS BRIDE.

The share being supposed to be finished, a real plough was brought forward, and the mockery seemed to cease. Instead of oxen, the *koritsia* were yoked and dragged it round the village square twice contrary to the way of the sun. One of the *kalogheroi* was at the tail of the plough and the other guided it in front, whilst a man walked behind scattering seed from a basket. This is shown in Fig. 8, with the *katsivelos* and his wife walking in front. The man with the seed was not included in the photograph from which the drawing was made. The *katsivelos* and *katsivela* were then yoked and made a third circuit, the *kalogheroi* still guiding. Vizyenos says that the *kalogheroi* draw the plough, in which he seems to be thinking of the practice at Viza, where until recently this custom was still kept up and it was so

drawn. But at Haghios Gheorghios it seems always to have been drawn by the *hopitais*, for a native now resident at Viza, who had not seen the festival for ten years or more, corrected Vizyenos' report on this point. The cries whilst the plough is being drawn I take from Vizyenos: *Nā xelēs (sic) δέκα γρόσια τὸ κοιλὸ τὸ σιτάρη! Πέντε γρόσια τὸ κοιλὸ ἢ σικάλη! Τρία γρόσια τὸ κοιλὸ τὸ κριθάρι! Ἀμην, Θεέ μου, γιὰ τὰ φᾶν οἱ φτωχοὶ! Ναί, Θεέ μου, γιὰ τὰ χορτύση ἡ φτωχολογία! May wheat be ten piastres the bushel! Rye five piastres the bushel! Barley three piastres the bushel! Amen, O God, that the poor may eat! Yes, O God, that poor folk be filled!*

This was the end of the play, and the evening was spent in feasting on the presents collected during the day.

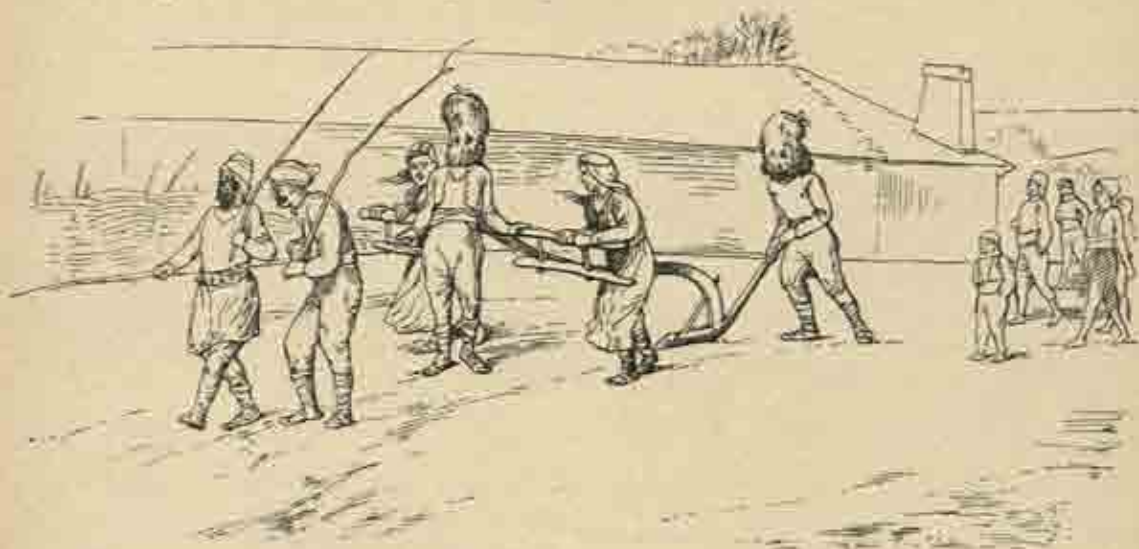


FIG. 8.—THE PLOUGHING.

Such is the festival celebrated every spring by the Greek community in these villages. Before examining it more closely it will be convenient to notice some other similar customs.

A kindred festival is observed on the same day at Kostî, in the very north of Thrace, near the Black Sea and the Roumanian frontier. I take an account of it from a pamphlet published at Constantinople.¹¹ A man, called the *χωχαστος* or *κουκηρός*,¹² dressed in sheep or goat skins, wearing a mask and with bells round his neck, and in his hand a broom of the kind used for sweeping out ovens, goes round collecting food and presents. He is addressed as king and escorted with music. With him is a boy carrying a wooden bottle and a cup, who gives wine to each householder, receiving in return a gift. They are accompanied by boys dressed as girls. The king

¹¹ Περὶ τῶν ἀναστεινῶν καὶ ἑλλαν τινῶν παραδόξων ἰθὺς καὶ προλήψεων ἐκ τῆς Ἀ. Χρον. μουσειῶν, Constantinople, 1873, p. 22.

¹² Κουκηρός, εἶδος παντάματος, ῥάλλης, θρακικά, p. 183.

then mounts a two-wheeled cart and is drawn to the church. Here two bands are formed of married and unmarried men respectively, and each tries to make the king throw upon themselves the seed which he holds in his hands. This he finally casts on the ground in front of the church. He is then thrown into the river, stripped of his skin clothes (*όλόγυμος*), and then resumes his usual dress. The throwing into the river is clearly a rain charm.



FIG. 2.—MASQUERADER FROM SKYROS.
(From *B.S.A.* xl.)

The custom at the Skyros Carnival described by Mr. Lawson,¹² and again by the present writer,¹³ is closely allied, though much less of it is left. There is no drama, but only the going about the town of sets of three masqueraders, the Old Man (*γέρονς*) (Fig. 2)¹⁴ with bells and skin mask and,

¹² *B.S.A.* vi. p. 128.

¹³ *B.S.A.* xl. p. 72.

¹⁴ Reproduced from *B.S.A.* xl. p. 75,
Fig. 1.

according to Mr. Lawson, with skin cape also, who answers to the leading *kalogheros* of Thrace, the Frank (*φράγκος*), not dressed in skins and probably corresponding to the second *kalogheros*, and the *koritsi*, a boy dressed as a girl. The statement of Vizyenos that only the first *kalogheros* is married and the single skinclad 'king' at Kosti, and the single Old Man with his bride at Skyros, make it likely that this represents a clearer tradition, and that the marriage of the second *kalogheros* is a comparative innovation. A passage in Fiedler, who observed the custom, shows that the phallic element was formerly present at Skyros also. He says: 'Einige kamen als Frauen verkleidet und Maenner hatten einen Flaschenkneibiss mit langem Halse, von welchem sie einen sehr obscenen Gebrauch machten zum allgemeinen Gelaechter der Zuschauer.'¹²

These observances fall into line with the numerous spring festivals of the spirit of vegetation, of which Dr. Frazer has written at length in the *Golden Bough*. The king and the rain charm by wetting at Kosti, and the marriage, death, and resurrection at Viza, are unmistakable marks of this almost worldwide group of customs. The prayers during the ploughing ceremony for an abundant harvest show that this is, or was, regarded as a magic rite to make the crops grow, as in the cases collected by Dr. Frazer,¹³ where it is especially the work of women. The dancing and leaping of the principal actors, so conspicuous at Skyros, fall, like the jumping of the *Salli* at Rome, under the same head,¹⁴ and the protective padding of the back seems to point to a custom of beating the victim to be slain, and if, as seems probable, the beating of the Roman scapegoat *Mamurius Vetulus* was inflicted by the *Salli*, an interesting parallel is suggested by the padded backs of the *kalogheroi* and the long wands carried by the *katsiveloi*.

But such a custom in Thrace suggests also a survival of the worship of Dionysus, upon which recent researches have thrown so much light. The circumstances are favourable to such a survival in a Greek community occupying the old city of the kings of Thrace, and surrounded and isolated by later elements of population, Bulgarian and Circassian.

The first striking point is the old nurse Babo carrying the child in a *λίχνι*. The survival of this word in the sense of a cradle, coupled with the strange use of a basket for the Babo's child, can hardly, under the circumstances, be anything else than a direct descendant of the classical use of the *liknon* in the worship of Dionysus. Then, as now, a basket was not a usual form of cradle, and when it was used it was with the idea of magically bringing good luck and fertility. The Babo, if *καρπομήνα* can mean foster-mother, will thus represent the nursing nymphs, and in any case the tradition that the child is bastard and his epithet *ἑφταμήνιχος*, a seven-months child, are appropriate to the premature birth of Dionysus, the love child of Semele, son of a mysterious father. The complaint of the Babo, that the child is growing too big for his cradle and wants a wife, suggests his identification with the leading *kalogheros*,

¹² Fiedler, *Reise durch alle Theile des Kaiserreiches Griechenland*, 1841, ii. p. 83.

¹³ *Golden Bough*, i. p. 92.

¹⁴ *Ibid.* i. p. 86.

who is at that point of the play just about to take one of the *keritsia* as his wife. A marriage is known to have been a part of the cult in Crete and at Athens, where it took place in the *boukolion*, a place connected with the solemn ploughing ceremonies of Athenian religion.¹⁸ That a *phallophoria* formed part of the worship of Dionysus has been clearly shown.¹⁹ The death and the mimetic flaying and resurrection follow in due order. But what is to be said of the *katsivelo*, the gipsy smiths who make the plough, and of the almost indistinguishable actor who kills the Dionysus? The classical Dionysus was killed by his worshippers and attendants the Titans, who also were smiths, so it may be hazarded that the second actor and the *katsivelo* represent characters originally the same, and these simply the worshippers of the god. The identification of the Satyrs with the Satrae of Thrace, and of the Titans with the worshippers, who first killed and then lamented the god, shows that the second actor and the *katsivelo* have this common origin and are to be compared with the Kouretes and Sali. The significance of their rods in the light of the beating of the Roman scapegoat by the Sali has been alluded to above, and whilst Vixen asserts that the *kalogheroi* beat one another, it may be suspected that originally a beating was inflicted upon the first *kalogheros* by the second and the rod-bearing *katsivelo*. In later times, when the gipsies came to be regarded as the typical smiths, the making of the ploughshare, the special task of the god's typical devotees, was assigned to them, whilst the part of the slayer has by an odd confusion been given to a duplicate of Dionysus, whose later origin is indicated by the parallels at Kostî and Skyros, where it is possible that once the Frank killed the masked actor.²⁰ The obscene gestures of the gipsies seem likely to be a survival of the marriage of the principal character. The use of such acts as a fertility charm, whether the connexion with the straw-heaps be accidental or not, is noticed by Dr. Frazer.²¹

The disguise as an animal and, although all sorts of skins are used, presumably from his drawing the plough, as a bull, fits with the tauromorphic form of the Thracian Dionysus. The death and flaying of the *kalogheros* thus appears as the descendant of the practice of killing and eating the bull-god of vegetation, possibly once as a human victim.

The giving of wine by the king at Kostî is an act worthy of the wine god, the more remarkable as such masqueraders are generally more apt to take than to give. It reminds us of the miracle of St. George of Skyros, who on his festival multiplies the wine poured into a jar sunk in the earth in front of his church.²²

¹⁸ The *Boukolion* and the *Bouzygion*, the field of the sacred ox-ploughing, were in close connexion. Harrison and Verrill, *Mythology and Monuments*, p. 100.

¹⁹ J. E. Harrison, 'Mythica vanaus Iacchi,' *J.H.S.*, xiii, p. 222.

²⁰ It is possible that the second *kalogheros* is the divine king of the coming year, who

kills his predecessor, just as at Nemi each king was killed by his successor. But the single actors in the parallel Greek observances make the view followed in the text, that the second *kalogheros* is later, more likely.

²¹ *Golden Bough*, II, p. 205 seq.

²² *E.S.A.*, xi, p. 75.

Common to all these festivals is the use of bells, whose prophylactic nature has been shown by Mr. A. B. Cook.²² Especially to the point here are the clashing shields of the Salli, compared by Dionysius (II 70) with the Curetes, of which Warde Fowler says: 'The old Latins believed that the spirit which was beginning to make the crops grow must at this time (March 1st) be protected from hostile demons in order that he might be free to perform his friendly functions for the community.'²³

In view of the resemblance of these festivals to one another, the history of the populations of Skyros and of this part of Thrace is of importance. The subject is obscure and I am indebted to Dr. Clon Stephanos for a reference to a contemporary authority²⁴ from which we learn that in 1645 the Venetian Foscolo transported the inhabitants of Skyros to Corfou. Thus it appears that the present inhabitants have hardly been there more than two hundred years.

If the island was thus depopulated, there are some indications whence the new inhabitants came. A study of the modern dialect of the town of Saránda Ekklesiás, about nine hours north-west of Viza, has recently been published,²⁵ in which the writer points out that it varies from the norm of the Northern Greek dialects as laid down by Hatzidhakis,²⁶ that in unaccented syllables *e* and *o* change to *i* and *ou*, whilst *ε* and *ο* disappear, in only being subject to the latter change. I noted the same peculiarity in the almost exactly similar dialect of Viza. From this, and from certain points of resemblance to southern dialects, the writer suggests that the population of this part of Thrace has come from some southern region since the fifteenth century, Hatzidhakis assigning the beginning of the differentiation of the Northern and Southern dialects to that period. But the resemblances on which he relies are very slight, and the point that seems really remarkable is that as regards this vowel-weakening, the dialect of Skyros stands in exactly the same position as these Thracian idioms.²⁷ Before drawing any certain conclusions, it would be necessary to have a more extended knowledge of the modern dialects than the material at present available admits. But it seems at least a plausible view that the vacancy created in Skyros by Foscolo was filled by emigrants from Thrace, bringing with them this festival.

It may also be noted that the native embroidery of Skyros has nothing in common with that of the southern islands, whilst it is almost indistinguishable from that of the northern regions to which the dealers give the general

²² 'The Gong at Dodona,' *J.H.S.* xii, p. 5.

²³ *Roma Festivals*, p. 41.

²⁴ The reference is to a poem on Cretan history of which an analysis is given in *Τὸ γεωγραφικὸν Ἑλλάδα, ἑκὸς Κρητῶν*, N. Σαῖα, Athens, 1869, pp. 225-295. This deportation of the Skyrians is narrated on p. 285.

²⁵ Στρατιώτῃς Β. Ψάλλου, *Θρακικὰ ἑρὰ Μαλέρα περὶ τοῦ γλαυκίσιος Ἰσίδμου τοῦ τῆς πόλεως Σαράντα Ἑκκλησιῶν*, Athens, 1925.

²⁶ *Einführung in die Neugriech. Dialectologie*, p. 342.

²⁷ This and some other points in the dialect of Skyros I noted during a visit in 1905.

name of Jannina. It thus appears that whatever evidence we have tends to connect Skyros with the north, and thus to bind together this closely allied group of Carnival observances.

R. M. DAWKINS.

I owe to Mr. Bosanquet the following note on a custom which he witnessed at Tripolitza in the Peloponnese. He writes that it is an old custom in this place for the boys to run round the town at sunset on the last day of February, clashing bells, and with especial vigour round any lame person they may meet. He saw the troop of boys brandishing bells, or with bells round their waists, headed by a lame boy, who carried no bell, but swung himself along at a great pace with the help of a stick. Asked what they were doing, they said, Βγάλλομεν τὸ φλέβαρο, or τὸ κουτσοφλέβαρο (Lame February), or διώκουμεν τὸ κουτσοφλέβαρο. Lame people are treated as personifications of the lame month. Mr. Bosanquet suggests that contact with some such custom may have helped in Skyros to obliterate the other features of the Carnival play, and to generalise and emphasize the bell-ringing element.

Notes in addition to Note 7, p. 196.

With the *Babo* compare the ancient *Baubo* (Clem. Alex. *Protrept.* ii. 20). With the derivation of the meaning 'mother of an illegitimate child' from 'maiden-mother' compare the Lacedaemonian *pertheneioi*.

In Zagori in Epeirus *καψο-* is used as a prefix to the names of unlucky persons, *Καψαλέξης*, *Καψοχοῆστος*, etc. See Kretschmer, *Der heutige Lesbische Dialekt*, p. 387.

R. M. D.

NOTES ON A RECENTLY EXCAVATED HOUSE AT GIRGENTI.

THIS house, known locally as the Casa Greca, was partially excavated about two years ago at the private expense of the owner of the land: it lies on a level site to the east of the road leading from modern Girgenti to the temples, directly opposite the church and gardens of S. Nicola, and a short distance north of the Temple of Concord.

For the most part, the ground has here risen about four feet since the Greek period, and the existing remains present a complete horizontal section of the house up to that height, formed by the lowest drum of the columns and from two to four courses of masonry in the walls.

It is unfortunate for the elucidation of the plan that the excavation has not been carried further north, as this would obviously have disclosed additional parts of the building and might have rendered it possible to define its full extent.

At present the house is entered from the west side of the peristyle, where, owing to a fall in the ground level, no indications of a boundary wall now remain.

I. *The Peristyle.*—With one exception the columns are all in situ, with drums of slightly varying height: they are polygonal on plan, with twenty flat sides corresponding to the flutes of the Doric column.

Like the rest of the masonry throughout, they are cut from blocks of the brown porous Girgenti stone, which in the case of the temples was invariably coated with marble cement.

Between the columns ran a course of flat stones forming a kind of plinth, and the square holes cut in the shafts indicate that a railing or balustrade separated the central area from the peristyle proper. A few of these plinth stones are still in position, and on the west side there is a small section of rough tessellated pavement with a lozenge-design in white spots on a red background.

The boundary wall on the east side contains some large blocks of stone, one measuring 6 ft. 2 in. \times 2 ft. 5 in. \times 1 ft. 10 in.: the masonry is not very well finished, and as a rule is laid in courses of fair regularity about 18 in. high.

In this wall is embedded a capital belonging to the columns in Room VIII., but unfortunately there are no remains of the order of the peristyle except the drums of the columns.

Room I.—Should perhaps be more properly regarded as a covered recess attached to the peristyle. The opening is too wide for a door, and there is nothing in the pavement to point to the removal of any part of the front wall which might have formed a doorway.

In the centre of the floor there is a square opening 3 ft. 10 in. across edged with a narrow stone curb and now filled in with earth. It was not possible to ascertain whether this covered a stone pavement at a lower level, but in any case it was obviously the hearth.

The rest of the floor is covered with a white tessellated pavement laid in plain lines.

Room II.—Communicates only with IV. The floor is of beaten earth, raised several inches above the general level, over a low basement, possibly some kind of hypocaust.

Room III.—The entrances from the peristyle and Room I. are very narrow (only 2 ft. 9 in. across) and show no provision for doors: a wider opening leads to IV.

The floor is the most elaborate of the whole series, and consists of an outer border of white tessellation as in I., and a centre formed of pink and blue slabs of veined marble, of which one corner remains intact.

Room IV.—Contains a bath. This is sunk about 1 ft. 10 in. below the general level and lined with 1½ in. of cement smoothly finished on the outer face, and rounded off at the angles.

It communicates with the basement under II. through an opening covered by a stone slab, and faced with red 'tegulae' about 9 in. square laid with very thick mortar joints according to the Roman method.

The rest of the room has a white tessellated pavement.

Room V.—Has a wide opening to the peristyle. In the S.W. corner two large slabs of blue veined marble are let into the floor, which is otherwise roughly tessellated in red, with a slight fall to three shallow gutters meeting in a circular drain carried down through the floor. Unless the room was open to the sky, this is evidently not a rainwater outlet and might point to the use of the room as a kitchen.

Room VI.—Has four doorways, and a tessellated pavement of rather more elaboration with a white design on a red background.

Room VII.—Has the only example of a doorway with 'reveals' on the jambs for the reception of a door: the opening is also of greater width than most of those leading from room to room.

The floor is of beaten earth, and the dividing wall at the end has now disappeared, but its existence may be traced in the foundations.

The wall between V. and VII. curves downwards to the centre in a way which recalls the curving walls of the Egyptians, variously explained by Choisy and others. The curve is here so pronounced that it cannot be due

merely to settlement, but must have been taken into account when the courses of masonry were set out.

Room VIII.—A portion of the Atrium. As the excavations have here ceased, the extent of the colonnade cannot at present be determined. The three columns exposed are considerably smaller in diameter than those of the peristyle, and have twenty flutes, properly executed. A capital belonging to one of these columns is embedded in the eastern wall of the peristyle and shows considerable refinement of outline, allowing for the fact that the final surfaces would be worked on the marble cement facing. The echinus is thoroughly Greek in its curve, and below the annulets occurs the typical Sicilian hypotrachelium, in this case a flat surface, but more usually cut back into a deep hollow as in some of the Selinus capitals.

The lower part of the last column to the west is covered with stucco in such a way as to fill in the flutes and bring the outer surface of the shaft to a plain cylinder, and this was painted a reddish crimson of the tone familiar in Roman domestic work.

This column in itself is enough to prove that the house was occupied at two distinct periods, in the second of which architectural detail was sacrificed in order to obtain a flat surface for painting.

On the south side a recess in the wall contains a well or cistern: the cover stands about two feet above the floor and has a circular opening.¹

The general disposition of the house shows only the most rudimentary system of planning. The rooms are mainly *en suite* and there is an entire absence of passages. The peristyle could only be reached by passing through at least one pair of rooms, and the extension on the west side, as shown by existing fragments of wall, would evidently consist of two more rooms.

A comparison of the plan with that of Dörpfeld's 'house at the Peiræus'² shows several points of similarity, notably the cistern in the Atrium and the paved recess opening from the peristyle, in this case, however, without the hearth.

RONALD P. JONES.

NOTE.

At Mr. Ronald Jones's request I add a note on the archaeological aspects of the house, of which he gives an architectural description.

Since he does not venture on any definite estimate of the date of the house, it would be very rash for me to do so, merely from his drawings; but it seems clear that he is justified in his inference that the house shows two different periods of construction, the one Roman and the other pre-Roman. It is not easy, from the present data, to distinguish what belongs to each period respectively, though the bath, for instance, and the later coating of the

¹ I was informed that this cistern communicated directly with the Bath in Room IV., but

it was not possible to verify this at the time.
² *Arch. Mus.*, ix. Pl. XIII.

columns in Room VIII., clearly date from Roman times. The general plan of the whole does not seem to have undergone any essential alterations.

The only satisfactory evidence for the date of the earlier period of construction is offered by the Doric capital from the columns in Room VIII. Mr. Jones's drawings show that the profile of this capital is of a refined and delicate curve, worthy of the best period of Greek architecture. Such a profile would probably, in Greece, imply a date not later than the fourth century; but it is possible that the best artistic traditions may have been preserved in Sicily to a later date. The type of the capital, with the flat band round the head of the shaft, occurs in Italy; examples quoted by Mr. Jones in a letter are those in the Forum at Pompeii and in the temple at Cora. In the latter, the band is much broader, the echinus appears to be quite flat, and the proportions are less satisfactory; the temple is assigned by Spiers and Anderson² to the time of Sulla. The capitals from the earlier portion of the colonnade of the Forum at Pompeii have more resemblance to the one in the house at Girgenti; these were erected by the quaestor Popidius, and are pre-Roman; according to Mau³ they probably belong to the second half of the second century B.C. In the Pompeian colonnade, as in the large peristyle at Girgenti, the lower parts of the columns have flat flutings; the complete fluting in Room VIII. is of course earlier in character.

We seem then to be justified in assuming that the house at Girgenti is at least pre-Roman in its earlier construction; and therefore that any comment on its plan must be based on a comparison, not with Pompeian houses, but with Greek houses such as those of Priene or Delos, or with the somewhat confusing example from the Piræus in which Mr. Jones finds the nearest analogy. I think therefore that it would be wiser to avoid the term atrium, as applied to Room VIII., at least so far as concerns the earlier period. It is of course unfortunate that the excavation has not been carried further, and the incompleteness of the plan makes it all the more difficult to explain. The relation of the two courts, for example, is far from obvious. In the only known houses of Greek type that have two courts, these have been produced either by joining together two houses originally separate,⁴ or by building another court on to an earlier and simpler house.⁵ It is possible that one of these two explanations may apply in this case also, but we must remember that Vitruvius describes the Greek—or rather the Hellenistic—house as having normally two courts, one for family life and one for entertainments; and this Sicilian example may represent the type he describes. The most interesting feature is the deep recess opening out of the north side of the peristyle, numbered as Room I., and containing a hearth in the middle of the floor. Such recesses, in a more or less corresponding position, are common in the Delian houses, and may be a survival of the original *pastas*, but in no case except this is a hearth preserved in one; the matter is of considerable import-

² *Architecture of Greece and Rome*, p. 145.

³ *Pompeii*, tr. Kalwy, p. 50.

⁴ e.g. Priene, house, xxxiii, p. 297.

⁵ e.g. Pompeii, the house of Sallust, *Mau-Nobley*, p. 277.

ance, as the presence of the hearth is a strong confirmation of the identity of this recess with the *exedra* mentioned by Galen⁷ in the primitive house as facing the door of the court and containing the hearth. A hearth is found in one instance at Priene in the corner of the porch of the chief room, in a similar position in the house.⁸

There is ample material for speculation in other matters connected with the house at Girgenti; but in the present state of our knowledge it is perhaps wiser to go no further.

E. A. GARDNER

⁷ *de Anat. lib. 1. 3.*

⁸ *Priene*, p. 295.

GREEK BOXING.

[PLATES XII., XIII.]

THE boxing of the Hellenic world even in the fifth century B.C. could boast an antiquity and renown to which modern pugilism can offer no parallel. The 'noble art' was associated with some of the most famous names of the heroic age, including even kings and demigods, so that the opprobrium which has become attached, perhaps unjustly, to the term 'prize-fighter' was precluded from the titles of the Greek champions. The antiquity of the sport is shown by the vivid descriptions of Homer and the place assigned to it in the Funeral Games, while a fragment of a relief showing a boxer armed with *ipávres* discovered by Dr. Evans at Cnossus carries us back to a remoter past.¹ In historic times especially in the earlier period we find the Ionians were the chief boxers and supplied most of the champions.² The Dorians, especially the Spartans, do not seem to have looked upon pugilism with much favour, although some victors are known to have come from the Peloponnesus. In the fifth century, however, Rhodes, Aegina, Arcadia, and Elis secured the greatest number of victories at Olympia³ in boxing and pancratium. This antiquity of boxing must have given the fighting men of the classical period the advantage of a rich store of accumulated experience and ringcraft, a fact which has great practical importance when we remember the different theories and tactics from which modern boxing has been evolved. The style of a well-trained pugilist is no more that which naturally suggests itself than the lunge of the modern fencer is the mode of attack instinctively employed by a novice. The Greek method of boxing, however, seems to have been surprisingly conservative: during historical times it changed in detail, especially in matters of equipment, but the Greeks having once chosen their style seem to have adhered to the same principles throughout and to have carried them to their logical conclusion. The reason of this is probably to be found in the fact that when the Greeks were first confronted with the practical difficulties of attack and defence in the ring they resorted to arti-

¹ *Annals of British School of Athens*, 1900-1901, p. 95.

² *Erause*, iii. 766.

³ See *Oxyrhynchus papyrus*, II. 222; C. Robert in *Hermes*, Vol. xxxv. Part I. pp. 141-195.

ficial remedies instead of learning how to use their fists. In the earliest contests of which we have any evidence strips of leather were wound round the knuckles and forearms of the combatants to prevent the fists from puffing and the arm from being broken, as it easily might be in round or downward strokes. These thongs, called simply *ἱμάρτες* in Homer, and subsequently named *μελίχαι* to distinguish them from the weapons of later days, can scarcely be regarded in the same light as modern boxing-gloves. It is true that they seemed mild in comparison with *μύρμηκες* or even the later *ἱμάρτες*, but we cannot accept the assumption of Dr. Krause and others that they actually deadened the blow of the fist. Professional pugilists seem to agree that fights of the present day in which very light gloves are used are more severe than if bare fists were allowed: the gloves have not enough padding to make any appreciable difference, while they prevent the knuckles from swelling and deadening the blows. This must have been the case to an even greater extent when strips of leather were employed.

When once the *μελίχαι* were officially adopted the practice of round hitting was confirmed and subsequent developments tended to make the thongs harder and heavier, till we find the *σφαῖραι* and *μύρμηκες*, and finally the disgusting cestus of the Roman amphitheatre. But the development was gradual. The Boxing contest was first held at Olympia in the 23rd Olympiad (688 B.C.) and the Boys' Boxing was added in the 41st.¹ Throughout the classical period it was an important event in all the chief athletic meetings.

The brutal *σφαῖραι*² were known in the fourth century and Plato³ recommends them as a means for discovering *τὸν τε εὐψυχὸν καὶ τὸν μὴ*, and even makes provision for freeing the combatants from responsibility in cases of death which must sometimes occur! But such instruments as these were apparently not used in the great national festivals. At any rate the vases do not show them. The *μελίχαι* seem to have been used in early historic times, and certainly were worn in the fight between Creugas and Damoxenus at the Nemean Games.⁴ During the fifth and fourth centuries the thongs were made harder and heavier, and towards the end of the fourth century and in Hellenistic times we find the type which is shown in the Panathenaic vase in the British Museum dated 336 B.C., and which is worn by the well-known bronze statue in Rome of a seated Boxer belonging to the Hellenistic period. Further than this we need not go in the evolution of the cestus, for nothing is gained from the contemplation of Roman methods of amusement: while it is unlikely that the gauntlets of the Roman poets were ever used in genuine Greek competitions. The Greek anthology, however, contains many epigrams on the terrible wounds inflicted by the *μύρμηκες*.⁵

The foregoing sketch shows that the conditions of Greek boxing seem

¹ Paus. v. 8. 9.

² Pollux, iii. 150.

³ *Lucia*, viii. 820.

⁴ Paus. viii. 40. 3.

⁵ The subject is fully worked out in *Antike Turnerspiele* by J. Jähner.

to have remained much the same from the beginning of the sixth century to the end of the fourth, and that although the tendency was to make the fist-covering more severe yet nothing was introduced that necessitated a style of fighting different from that described by Homer. This alone would be enough to show that boxing had already passed through several stages before it reached the one that commended itself to the Greek mind, and boxing pre-supposes a fairly advanced stage of civilisation, to ensure fair play, and considerable experience to learn how to finish a man off by sheer hitting unassisted by kicking or strangling. It is difficult to account otherwise for the conservatism of Greek boxing, and in this connexion it is interesting to glance at the frequent and radical changes made in our own Prize-Ring, the number and importance of which are not perhaps generally realised. The father of English prize-fighting was Figg, whose portrait was painted by Hogarth, and whose name stands first on the roll of recognised champions.⁹ His date is 1719. The period between that date and the Sayers-Heenan fight in 1860 covers the whole history of the genuine P.R. during which the science of fist-fighting was evolved and was brought as near perfection as is humanly possible. The attitudes and tactics of the Belchers were very different from those of Figg. During this period throwing was allowed as well as hitting, and a fall would often have more effect on the issue of a fight than a blow which might seem more effective to a spectator. A round came to an end as soon as either combatant went down, so that they varied greatly in length. In all these fights bare fists were used, which Englishmen feel to be the only true and correct style of boxing; 'all the rest are mere imitations—mere travesties of the original: to excel in them one has to abandon some of the elementary rules of the orthodox art.'¹⁰ When, however, the exalted morality of the Victorian age had declared fist-fighting to be not only illegal but undesirable, boxing with gloves was introduced under a new set of rules in which wrestling was forbidden: a change which enables some men to win fame who formerly would have stood no chance of first-class honours. At the present time the abuse of the 'knock-out' with the right on the jaw, and the exigencies of glove-fighting are vitiating the style of all but the best boxers, professional and amateur. Thus in England much has happened in a comparatively short time. We must now find what were the Greek tactics and how far we can recover the regulations in force in different epochs and especially during the best days of Greece.

Unfortunately the evidence is mostly of a conventional nature, and so must be treated with caution. The literary accounts are either very early or very late, and most of the latter seem to be echoes of Homer. The vases on the other hand do not help us nearly as much as might be expected. The scenes on vases of a good period which are of any practical value are

⁹ Bodminston Library, *Fencing, Boxing, and Wrestling*, p. 135.

¹⁰ Bodminston, *Fencing*, p. 144.

very few, and even in these allowance must be made for the conventions of the vase painters.

Let us take the literary evidence first. We have the well-known descriptions of boxing-matches in Homer and Vergil,¹¹ which are admirably discussed in the Badminton Library,¹² though the account of the Homeric contest seems to include some misunderstanding of the Greek.¹³ We also have the account by Theocritus¹⁴ and one by Apollonius Rhodius.¹⁵ Quintus Smyrnaeus and Statius also follow the established epic tradition. We need consider only those matches which were fought with *μάκρες*. In the later accounts the gloves were of such size and weight as to dominate the whole character of boxing and to make it more like fighting with clubs: accordingly the post-Alexandrine stories are of little intrinsic value as evidence for Greek boxing, though they occasionally throw a sidelight on earlier narratives. Even the *μαλίσχαι*, however, make comparison with English boxing difficult, so we must be particularly thankful that Homer has described the fight with bare fists between Irus and Odysseus with a clearness and moderation very rare in the annals of the ring. It is clear that such encounters were of common occurrence from the readiness with which the challenge was given and taken, the easy but strictly orthodox manner in which the preliminaries were arranged, and the sporting spirit of the nobles, who evidently loved a fair fight for its own sake whoever the combatants might be. The two competitors presented a very different appearance. Irus was much the taller and heavier¹⁶ and had also the advantage in age. Odysseus on the other hand was of medium height but broad-shouldered, deep-chested and muscular:¹⁷ evidently a typical middle-weight; ten years earlier he had been one of the best runners and wrestlers in the Greek army, so that he had possessed that quickness on which a middle-weight must rely when pitted against a man heavier than himself.

The tactics he adopted were exactly those which a modern professor would employ against a heavier but unskilled opponent, namely, drawing and countering. His success was complete. Irus was much dismayed when he saw how big his opponent stripped and was probably more so when he met the eyes of the king. Anyhow he seems to have made a half-hearted lead off more as a feeler than a blow, as beginners often do when starting a round with an opponent with whom they are afraid to close at once. This blow contrary to the usual custom must have been delivered with the left for it hit the right shoulder of Odysseus. It may have merely fallen short, but when we remember the advantage in height and reach possessed by Irus, it is more likely that Odysseus saw the blow coming, ducked his head and raised his shoulder to guard the chin and then cross-countered heavily with a hook-hit:

¹¹ *Iliad*, xxiii. 681-699. *Aeneid*, v. 302-484.

¹² *Fencing, Boxing, Wrestling*, pp. 125-131.

¹³ E.g. *ἐν* τῷ *ἔργῳ* *ἔσπευε* *ἵνα* *ἔρῃ* is not 'Epeus made a rush at him,' but 'rose on tip-toe,' see below. *ῥῆμα* = *ῥαπίδῃ*, which was

used till 15th Olymp. see *Pana.* i. 44. 1. The belt proper = *ζώνη*, *iv.* 132.

¹⁴ *xxii.* 107 ff.

¹⁵ *Argonautica*, ii. 67 ff.

¹⁶ *Od.* xviii. 4; also 59-100.

¹⁷ *Il.* iii. 193-4.

otherwise it is difficult to understand the tremendous effect of this knock-out, especially as Odysseus purposely refrained from putting forth his full strength. This fight finds a close parallel in the description by Apollonius Rhodius of the fight between Amycus and Polydeuces.¹⁵ Apollonius it is true often imitates Homer and is here describing a combat of the Heroic age, but late writers show no hesitation in ascribing to an earlier period the customs of their own time, so that the account may be regarded as a fairly trustworthy description of a Hellenistic encounter. The fight is much more stubbornly contested than that of the Odyssey, but the opening for the decisive blow is made in just the same fashion and the same knock-out is administered, except that the blow lands above instead of under the ear, probably because the men were more evenly matched in height.

Another account of great interest is the racy and graphic description in the XXII Idyll of Theocritus of the match between Amycus and Polydeuces, which contains all the essential features of a thoroughly sporting fight under recognised rules and familiar conditions.

First the spectators arrive and form a ring, and the principals bind on their thongs over fists and forearms, such as are shown on the Panathenaic vase No. B 607 (*M. d. I.* x. 48e, 2) in the British Museum. On entering the ring the two champions at once began to spar for position. He who could so place himself that the light fell in his opponent's eyes would naturally score a great advantage. The round, therefore, opened briskly and it was only after a hard struggle that Polydeuces gained the coveted place. Amycus, however, determined to turn the tables by a sudden onslaught and made a furious rush, always a risky proceeding against a strong opponent on guard. He received a blow on the jaw, which, had it been better aimed or Amycus less tough, might easily have ended the fight then and there. As it was it merely checked him for the moment, and in a short time he came on harder than before. Then there was much in-fighting and the spectators shouted in their excitement. Polydeuces watched his opportunity and at last knocked Amycus down with a blow between the eyes. This ended the first round, unless we count separately the preliminary struggle for position. There was of course no fixed time limit, but they wait to see if Amycus is capable of continuing the fight within a reasonable time, and after a little while he rises. In the next round there was some more quick work at close quarters, in the course of which Amycus played on his opponent's body while Polydeuces aimed more at the face. Finally, Amycus, who seems to have done most of the attacking but was having rather the worst of the encounter, tried to finish the fight by a device which would not have been allowed at Olympia. With his own left, that is with his guarding hand, he seized his adversary's guard, pulled it down and delivered a swinging round hit. Polydeuces ducked and countered just below the left temple with a similar blow which Amycus was not quick enough to avoid, and which knocked him out so completely that he was nearly killed.¹⁶

¹⁵ *Argonautica*, II. 67 *seq.*

¹⁶ Mr. R. J. Cholmely in his edition of

Theocritus (Clarendon Press) gives a rather different version, and translates *εὐθεία* as 'straight

There is no need to describe the other fights in detail. They all tell the same story: two men take a firm stand and swing blows at each other's heads and flanks armed either with simple thongs or with the cestus. It is strange that the Greeks never learned to rely on straight hitting, for the principles of flat-fighting can be applied equally to fists covered with the thongs they used before Hellenistic times. The reason is probably two-fold:—First they never realised the paramount importance of foot-work. Even Vergil makes Entellus the famous champion miss his footing in a manner which judged by any standard is absurd. Accurate and quick use of the feet is necessary for the delivery of a really telling straight blow: if both men are standing still round hits are undoubtedly more severe, and it may be worth while to run some risk in order to bring off a knock-out sooner or later. This is in fact often done at the present time. Secondly they spoiled their chances of success in the infancy of the sport by invoking mechanical aid instead of studying its scientific principles; and so to compensate for their lack of skill, they condemned their fighters to wear *ipăvres*, the swaddling clothes of boxing, which prevented its proper growth. The same spirit which evolved the Macedonian phalanx instead of the equally formidable but more mobile legion developed the cestus instead of the knuckle-duster. It took the British pugilist less than a century to find that a boxer should trust mainly to his left for the attack. In this lead-off the left fist is driven straight from the shoulder into the face or body of an opponent by a lunge forward with the left foot and a strong drive from the floor with the right leg; the feet whether in advance or retreat must never be crossed or even in a straight line, nor must the right foot ever be in advance of the left. Thus speed both in advancing and retreat is secured, while a firm basis is given against a blow from any quarter: when on guard the weight is distributed evenly on both feet so that it can be thrown in a moment on to one or the other.

Leads may be made with the right and hook-hits can be delivered by either arm as time and occasion require; but the underlying principle must always be observed that the blows travel by the shortest route possible and that especially in long range hits they should be driven home by all the weight of the body and force of leg-drive. At the same time firmness of position as well as speed of movement should be insured by the proper use of the feet. To the last the Greeks seem to have ignored both these facts, to have stood with the feet about level but well apart and then to have swung their bodies round from the hips to give impetus to the blow, often rising on the toes of one foot to increase the swing. This can be judged from their guards as well as from their hits as shown on vases: it agrees with the descriptions of all fights and explains the frequent references in literature to blows on the side of the head and body. Fortunately just where the

from the shoulder, lit. with the weight of his shoulder.' The literal meaning makes excellent sense, while the derived interpretation seems to me to read into the account an entirely modern idea. The very fact that Amycus is considered

to have executed an unusual manoeuvre by advancing his left side instead of standing squarely (*δεχάμε ἀπὸ πρὸς ἄλλης πλαθείας*) shows how different was the orthodox Greek position from that of the English Ring.

literary evidence is weak, that is to say in the fifth and fourth centuries, the vases are helpful. The number of those which throw any light on the subject is limited: there are far fewer representations of boxing matches than of almost any other sport, which is strange considering the familiarity of the subject. The best series is in the British Museum. The first is No. B 295, a well-known amphora signed by Nicosthenes and dating from about 520 B.C. Not very much information is to be gained from it; the pose is conventional and the figures are ungainly; however it confirms the foregoing remarks in some important points. First, the impetus is gained not by a lunge but by swinging round from the hips: for in the larger group though the legs are in exactly the same position we see the back of one man and the chest of the other. The legs seem at first sight to indicate a lunge, but this is at variance with the rest of the composition, and Prof. E. A. Gardner considers this treatment to be a convention intended to represent the feet at about the same level but widely separated. Similar stylistic devices may explain why the combatants seem to be on different planes. The left fist and foot of the right-hand man are behind the right of his opponent. To make the scene more realistic the latter is bleeding profusely at the nose. Both wear light thongs woven closely round the entire hand but not above the wrist.

Next comes the Panathenaic vase B 140, on which one of the combatants is bearded and seems to be pressing the attack. It is difficult to understand the position of the feet unless they are intended to be approximately level: otherwise the elder man has thrust his right foot forward and the younger his left. The elder guards with his left hand, the fingers of which are extended, while his right arm is raised and bent to deliver a blow. The younger is also guarding with his left and the fist is closed to meet the blow: his right is contracted but lowered and he evidently intends to meet his opponent's attack with an upper-cut. The head is drawn back as though getting out of reach, instead of being sunk on one side, another sign of round hitting.²⁰ It is evident that the men are engaged in in-fighting, short arm and contracted blows are the only ones employed and there is no sign of a real lunge, or any attempt to employ the weight of the body or drive of the legs by a step forward. The *iudices* are of a light description and are indicated merely by lines drawn across the knuckles and wrist. The forearm is scarcely protected at all. To the left of the group is a referee with a large stick, and to the right an ephedros holding his thongs.

We are fortunate in possessing a fine kylix, B. M. *Vases* E 39, (Pl. XII.)²¹ in the style of Duris (B.C. 480-450) showing four pairs of boxers. Three of these pairs represent Ephebi actually engaged, and one shows boys preparing for the contest. The same position of the feet is shown in a much more natural and pleasing manner by letting one of the competitors be seen partly from behind. The motive of most of the figures is the same: the left arm extended for guarding, the right contracted for hitting. Here,

²⁰ Cf. *Act.* v. 427:

Abduxere retro longe cepita ardua ab ictu.

Their heads held high are drawn back.

²¹ *Wiener Vorlesungsblätter* viii. 1.

however, the hand is not raised, but the elbow is drawn back in a horizontal line, so that the fist is on a level with the shoulder. At first it seems as though a straight hit were contemplated, but it is more likely to be a truer and less conventional method of showing a round hit, just as the feet are more artistically treated. This impression is strengthened by the position of one figure who is pressing the attack. He has raised his right foot almost off the ground and has swung his right arm back to gain impetus for the blow, thus leaving himself quite exposed to a straight hit. The central group is of great interest as it shows a knock-out. The blow landed probably on the jaw or the side of the head, for the man has fallen on his left knee in a position very different from that of one who had been knocked backwards. His opponent has swung his right back to give a final hit, but the vanquished holds up one finger to acknowledge his defeat.

The thongs shown on this kylix reach about a third of the way up the forearm.

Two more fine groups of boxers are shown on B. M. *Vases* E 78, (Pl. XIII) a kylix of the best red-figured period, showing various athletic scenes. The first group is a good example of a familiar design. One combatant has swung back his right hand and raised himself on the toes of the right foot, while his left arm is raised and bent to ward off a counter stroke. His opponent, a heavier man whose face seems to have suffered, extends his left and contracts his right for a counter. At the same time he tries to get out of reach not by 'retreating in good order' but by thrusting back his right leg, bending his knee and leaning back, a most dangerous proceeding, should the attack be well followed up. The group seems to show sparring for practice only. The hands are open and the fingers separated. The attacker has thrust both hands forward but is not using the weight of his body. The other is guarding in the manner shown on the last kylix. The thongs in these groups reach about halfway up the forearm.

The large Panathenaic vase in the British Museum (No. B 607, *Mon. d. I.* x, 48e 2) supplies some valuable evidence as to the form of the cestus and the physical type which were most in favour at the great boxing matches at the end of the fourth century. In both respects there is a close resemblance to the well-known seated bronze boxer of the Museo delle Terme. The men are very powerful and thickset and the gloves are formed of heavy thongs which reach nearly to the elbow. Their tactics seem much the same as those on the previous vases. One is stopping an attack by thrusting out his left arm and at the same time drawing back his head. At first it seems as though he were making a forward lunge in the most approved modern style, but on closer inspection one sees that the left foot is not meant to be stepping forward but to be set apart from the other according to the usual convention; while the fact that instead of throwing the body weight into the blow the boxer is drawing his head and body back shows that defence and not attack is represented.

Another well-known Panathenaic vase (B 612) shows two boxers on guard wearing *μελίσσαι*. Both figures have the feet planted well apart, the

left arm extended with the fingers open, the right fist shut and the arm bent and drawn back and held on a level with the chest. The vase belongs to a late period and the drawing is poor, but it gives a good illustration of a recognised position.

Thus all the evidence shows that the Greek boxers of all periods relied mainly on a swinging blow with the right, and that they never appreciated the smashing force of a quick left lead driven straight from the shoulder, though left-hand blows were sometimes delivered. Some vase-paintings have, however, been considered to show that even if modern methods were not much in favour with the Greeks they were at least recognised. It is therefore necessary to examine the most important of them. The first (Stephani *C.R.* 1876, 109) shows a pair of boxers, one of whom has hit his opponent in



FIG. 1.—FROM A PANATHENAIIC VASE (Stephani, *C.R.* 1876, 109.)

the face with his left hand. The blow, however, in no way resembles a straight hit: the arm is not straight but 'hooked'; it has not been shot out but it has been swung round or down. The fist is not even clenched, only the flat of the hand is used. Again, the forward position of the left leg need not indicate a lunge, for the position of the legs of both combatants is exactly the same. If this be not a mere schematic device it may represent no more than that the feet are planted wide apart. Finally, though a blow has been scored with the left hand, the main attack is just about to be delivered with the right. Clearly, what has happened is this:—Both men were in the orthodox position with right fists drawn back and ready to strike, and left arms with the hands open extended to guard. Then A swung his right arm back and downwards to deliver a swinging blow, but at the same time left his head unguarded though within range: whereupon B without even shutting his fist has given him with his left or guarding hand a quick hit in the face

and is about to deal a decisive blow with the right before A can recover from the shock or regain his position.

There are other illustrations also, of doubtful value, such as Benndorf, *Gr. u. Sic. Vasenb.* xxxi. 2. a, and a kylix of Pamphaios (*Mon. d. L.* xi. 24).



FIG. 2.—FROM A PANATHENAIAN VASE. (LOUVRE, F 278.)

Much more important is a vase in the Louvre (Fig. 2; Pottier, *Vases antiques du Louvre*, vol. ii. Pl. 82) where it really does seem as if a knock-out blow on the jaw had been delivered by a straight left lead. This impression is confirmed if we contrast the position of the falling man with that on the Duris vase quoted above. But from the usual position of the hands it is probable that 'chopping' or a tendency to strike downwards prevailed even in comparatively straight hitting. Thus, though it is clear that the left hand was sometimes used for attack, it is equally clear that the method of using it

differed radically from that employed in the English ring. Nothing proves this more conclusively than the way in which on all vases the body both in attack and defence is left exposed to straight hits. Contrast such positions with popular prints of prize-fighters on guard, or with the illustrations in any good book on boxing, and the difference will be seen at once. It is natural that hits should be given with the left as well as the right, when an opportunity occurs; but if the pride of the English ring, the straight left, is to be made really effective it must dominate the whole scheme both of attack and defence. It can be confidently stated that this was never the case with the Greeks.

The foregoing sketch shows that the evidence of the vases agrees with the literary tradition so closely that although some questions of procedure remain doubtful yet the main features of a boxing match at Olympia in classical times can be reproduced with tolerable certainty. Let us endeavour then to picture the probable course of such a contest in the fifth century.

According to Dr. C. Robert²⁵ the boxing came in the middle of the third day, that is to say exactly in the middle of the whole festival, and when we remember that the severer contests were held in the middle of the day with the express purpose of increasing the distress we may well wonder at the fortitude of the Greek athletes. Even for spectators the noonday sun at Olympia in July is a trying ordeal, while the languor caused by the heat in the valley of the Alpheus seems to preclude the possibility of such violent exertion. Especially would this be the case in boxing, which Homer truly calls ἀλγιστή, 'causing distress,' a word which probably implies not so much the pain from the blows as that distress which causes the loss of most fights not decided by a knock-out. However, the competitors had passed through nine months of training on the spot and represented the survival of the

²⁵ *Loc. cit.* Diagram of the events.

fittest. When the pairs and byes had been decided by lot, the first pair entered the arena. We have no evidence that the size of the ring was defined exactly and there were certainly no ropes: thus some of the most familiar devices of the English ring such as cornering and slipping, which are due to the presence of a barrier, would be unknown. It seems rather that the science of advancing and retreating had not been encouraged and that the combatants were expected to stand their ground as far as was possible. Each was accompanied by his second, either a relative or a professional, whose first duty was to bind the *μαρτερ* round the fist and forearm but leaving the thumb free.²⁰ Apparently the seconds, contrary to modern custom, were allowed to advise the principals during the actual progress of the struggle as well as between the rounds.²¹ This is shown by the well-known tale of Glaucus the Carystian, one of the most redoubtable athletes of antiquity. When a boy he re-set a ploughshare which had become loose, using his fist as a hammer, whereupon his father, admiring his strength and handihood, entered him at Olympia for the boys' boxing match. Then, when he was being hard pressed in the fight by his more skilful opponent, his father (who was, we may suppose, acting as his second) shouted *ὦ παῖ, τῆς ἀπ' ἀπόρτου*, whereat with a mighty effort Glaucus felled his antagonist. It is interesting to note that this same Glaucus was one of the few who won at Olympia both as boys and men. He was also a *περίδοτος* having won at Isthmian, Pythian, and Nemean games as well. When the two competitors entered the ring there was no preliminary hand-shake; indeed, there seems to have been little of that mutual goodwill which forms an important part of what we call sporting feeling. On the contrary it was much more in accordance with Greek traditions to advance *δαιρὸν δερκόμενοι*—looking daggers and meaning mischief—though it is most unlikely that they wasted their breath in the murderous boasts of Epic heroes. The first struggle was to obtain a good position,²² which seems to show that there was not much idea of working round, although it is not necessary to suppose that a position once taken was rigidly adhered to throughout the contest. Then, when the men had determined their respective places, a firm stand against round hits was secured by planting the feet well apart and nearly on a level, with the body square so as to lead off with either hand after the manner of the earliest school of English boxing. The Greeks, however, differed from the worthies in the days of the early Georges by employing mainly round and not straight hits. The natural corollary is that they relied chiefly on a knock-out with the swinging right.

After the preliminary manoeuvring for position and sparring for an

¹² Schol. Plato. Rep. I. 338 c, ἡ ἀντίγραφος αὐτῆς ἀλλήλων ὁμοῖα τοῖς βιβλίοις τῶν ἀνθρώπων.

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RedBare, fish and television.

[illegible]

opening the work would begin in earnest, and terrible work it would be. Classifications according to weight would have been foreign to Greek ideas: a man came to Olympia to win the all-comers championship or nothing, and so the boxers were mostly heavy-weights. When two heavy-weights armed with *ipásteres* box in the manner indicated, a slogging match of the most barbarous description almost necessarily follows. On the other hand wrestling, which played so important a part in the P.R., was not allowed, neither was clinching;²⁶ such devices were reserved for the pankration. The bout might be ended very quickly then as now by a knock-out from a lucky hit; but as a slow slogging hit is much more easily guarded than a straight drive, and as Greek athletes appear to have been capable of taking much punishment, the fights must often have been long-drawn. Glaucus, of whom mention has been made already, was especially famous for his skill in *χεῖρονομία* and was represented on guard in his statue which Pausanias saw. In a protracted battle the length of the rounds was determined much in the same manner as in our own P.R., that is to say, either by one of the combatants being knocked down, or by a lull in the fray occasioned by the simultaneous exhaustion of both.²⁷ The fight was to a finish,²⁸ and if not decided by a knock-out was ended by one of the combatants raising his finger in acknowledgment of defeat.²⁹ If a draw seemed otherwise inevitable it sometimes happened that an exchange of free hits would be agreed upon, a practice which must have given the first striker a great advantage.³⁰

Throughout the meeting order was maintained, the rules enforced, and the awards made by the Hellanodikai. How far they tried to keep silence does not appear, but apparently the spectators shouted when they became unusually excited,³¹ which must have embarrassed the seconds. If a modern pugilist could witness a fight of this description he would condemn the style of the Greeks on the ground that they wholly failed to recognise the two great principles on which the whole science of boxing rests:— good foot-work and straight hitting. There is no reason to doubt that the Greek boxers exhibited all the quickness of resource and power of endurance essential to the fighting man, or that they had reduced to a fine art the delicate operations of timing, countering, and getting out of reach.

They were also fully aware of the importance of utilising the weight of the body to increase the force of the blow; but their style of hitting must have been comparatively slow, like a sabre compared with a foil, and it is difficult to believe that any Greek could have stood up for long against a first-rate modern prize-fighter if both wore the *ipásteres* that were used in the fifth century. It is to be regretted that the Greeks made the *ipásteres* more

²⁶ *οὐδὲ δὲ πύκνωσιν οὐδὲ κλινὴν βούχαινον ἐδίδου* αὐτῶν Λέοντος, Plutarch, *Symp.* ii. 4.

²⁷ Ap. Rhod. ii. 86 *οὐδὲν δὲ βῆμα ἐκράδον*.

²⁸ *ἡμέτερον αἶμα*, Paus. vi. 10. 1.

²⁹ Plut. *Lycurgus*, c. 19 *ὅς τις χεῖρ ἀνέσθιεν*.

³⁰ See Krause, p. 522, cf. Pausanias, viii.

40. 2.

³¹ Plutarch, *De profect. in virt.* c. 8. At the Isthmian games Aeschylus remarked to Ion that while the spectators cried out whenever a blow was struck, the man who received the blow was silent.

and more severe. Fist-fighting is a noble art and it secures a decisive result without (as a rule) permanent injury to either combatant. But boxing with loaded gloves is spurious sport, in which those only would engage who made it their trade for the pleasure of a brutal populace. A sport which unfits one for everything else defeats its own object and justifies the attacks made on its devotees by Euripides³² and Kipling. Both these authors, however, seem to have attacked the gentlemen athletes in a manner which has called forth considerable protest. It is likely enough that when actually in training the athletes, just as rowing men are fit for little except the river when training, were *ἐπρώδεις* and easily upset, but it does not follow that even in the fourth or third century the competitors as a class devoted themselves to athletics exclusively, although a certain proportion would naturally do so. On the other hand under modern conditions all the competitors at Olympia would be considered professionals. It is true that the wreath of olive or bay had no intrinsic value, but we are apt to forget the substantial prizes that fell to the victor's lot as well. Thus Solon decreed that 500 drachmae should be paid to each Olympic victor,³³ and further that he should be maintained for life at the Prytaneum, roughly equivalent to giving a University Blue the perpetual right of dining at the High Table of his college; a very valuable privilege if he were to live all his life in Oxford or Cambridge as the Athenian would in Athens. Moreover the competitors at Olympia were necessarily the few who had already fought before their way to the top of their profession, from local athletic meetings upwards, and at these provincial competitions prizes of value were offered. Even Heracles says quite naturally in *Alceste* that he competed for the prize because it was *ἀξίον πόνου*. This being the case it is strange that Greek athletics suffered so little from the professional spirit and that gentlemen competed throughout the best period.

Perhaps the chief reason was that the honour of winning at Olympia outweighed any other inducement that could be offered, and this would be a more powerful safeguard against collusion than the vigilance of the judges. For although they had always a keen eye for material gain yet the spirit and environment of the Greeks in their own social intercourse and especially in regard to athletics resembled that of our own Public Schools and Universities more closely than any other institutions ancient or modern.

It must be acknowledged that the generosity and courtesy which we consider essential to sport were often lacking, especially in the treatment of the vanquished. But the fact remains that the Olympic festival retained its reputation for fair play for centuries, in spite of professionalism on the one hand and slavery on the other. No stronger proof could be given of the honour and vitality of Greek athletics.

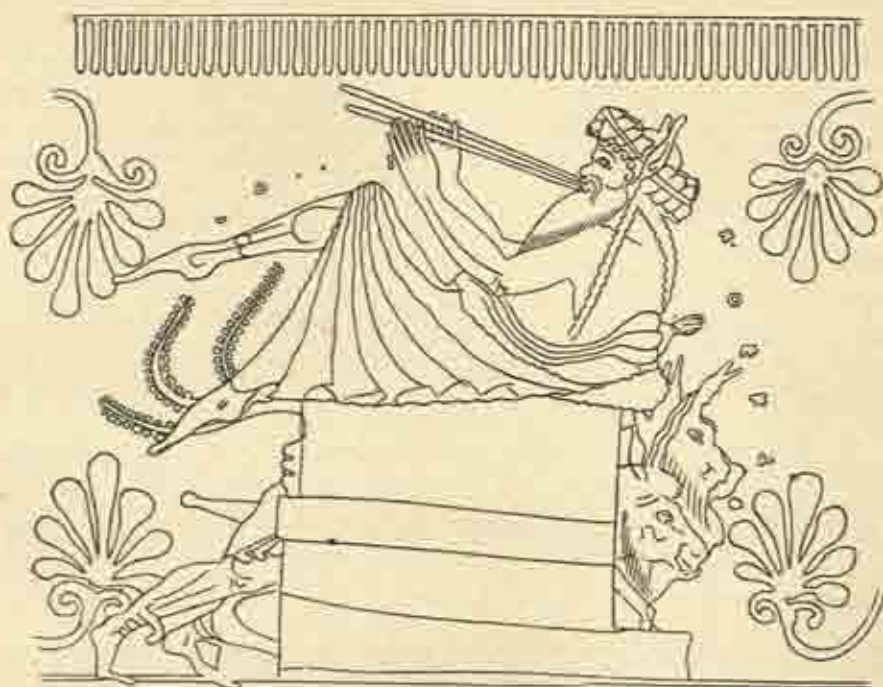
K. T. FROST.

³² *κακὴν γὰρ ἔσταιν κ.τ.λ.* Athen. x. 413. The parallel between this and Kipling's tirade against flannelled fools is very close; one might almost be a free translation of the other.

³³ Also 100 drachmae to a winner at the Isthmian and other games. Plutarch, *Solon*, c. 23. Krause, *op. cit.* ii. p. 765.

A NOTE ON THE CACUS VASE OF THE ASHMOLEAN MUSEUM
(*J.H.S.* XIII. 70).

IN this *Journal* in 1893 I published a very interesting amphora discovered by Mr. Arthur Evans in a tomb at Gela in Sicily,¹ which I described as shewing on one side Cacus dragging the oxen of Geryon backward into a cattle-shed, while a satyr above plays the flutes, and on the other side Herakles singing to the lyre. This vase has been subjected to a



critical study by Dr. E. Pernice,² who has found some interesting facts which I had not noted when I published the vase. I must begin by heartily congratulating him on his keenness of eye and his ingenuity. But at the same time I must express my regret that Dr. Pernice did not before

¹ *Ashmolean Catalogue*, No. 211, Pl. I. a.

² *Jahrb.* 1906, p. 45.

publishing his paper, commission me or some other colleague to re-examine the vase itself. Owing to this omission, the inferences which Dr. Pernice has drawn from his observation are almost entirely misleading.

The fact which Dr. Pernice has observed is that the two legs which I supposed to be those of Cacus (see the cut, repeated from *J.H.S.* 1893, p. 71) are really quite different ones from the other. One wears a high boot, the thigh is bare, and a chiton appears below the waist with a sword in a sheath hanging by it; the other is draped down to the ankle, and does not look like a male leg at all. By comparison with an Attic lekythos at Berlin³ which represents the Judgment of Paris, Dr. Pernice tries to shew that the two legs belong originally the one to Hermes, the other to Paris, in the scheme which represents Hermes seizing Paris to prevent him from modestly trying to escape from the honour forced upon him. In fact, they do closely correspond with the two limbs in question in the vase-painting cited. When, however, Dr. Pernice goes on to find the end of the herald's staff of Hermes in a curious knot among the horns of the oxen, he is mistaken. Mr. Anderson's drawing of the Cacus vase is, I need scarcely say, excellent; but it is not perfect, and a close examination shews that he has been led into a slight inaccuracy by a break on the surface. The horns of the oxen are oxen's horns and nothing else.

The view of Dr. Pernice is that the painter of the lekythos had in the first instance painted on his vase a group of Hermes struggling with Paris, but he thinks the satyr also belongs to the original scheme; and he combines satyr and struggling group on p. 50 into a design which he confesses to be almost unintelligible, but which he supposes to have some relation to early scenic representations at Athens.

The supposed caduceus I have already stated to be an imagination. And as this group of Hermes and Paris is allowed by all who have discussed the Berlin vase—von Duhn, Furtwängler, Miss Harrison, and Pernice himself—to be nothing but a slavish copy of a group of Peleus⁴ seizing Thetis, the latter subject, if any, would be part of the original design of the vase, and Dr. Pernice's heading *Ein Paris-Urtheil* turns out to have no justification. But on my carefully examining the vase in company with Mr. Arthur Evans, it appears that nothing beyond the two legs of the supposed group was ever painted upon the vase at all. There is no sign whatever of repainting, no trace of any figures in silhouette beneath the surface of the cattle-shed. In fact, what we see in the painting of the vase is exactly what from the first the painter meant us to see. His composition is curious, but nothing like so curious as the restoration of Dr. Pernice would be.

A very simple explanation of the vase-painting suggests itself. The vase painter, who had no imagination, but was of a very imitative turn

³ Figured in the *Jahrb.* 1906, also in *Arch. Zeit.* 1888, Pl. XI. Cf. Furtwängler, *Cat. Vasen Berlin*, No. 2005.

⁴ The sword in particular is conclusive evidence on this point.

of mind, was set to paint a subject new to him, and did not know how to proceed. He had recourse to the barest eclecticism from subjects familiar to him. The cattle-shed he copied from an altar, the reclining satyr from a silenus lying on the back of an ass. Needing two human legs, he took them from the group of Peleus seizing Thetis. For the oxen he had no prototype at hand, so he composed them;—and a very poor business he has made of them!

I do not feel sure that the painting is intended to represent the adventure of Cacus, and in fact I have always had doubts on that head. But Dr. Pernice's observations do not detract anything from the probability that this is the meaning, nor has he any other suggestion to offer as to a possible interpretation. A shed with the heads of cattle protruding from it at one end, and two human legs protruding at the other, what else can this mean? Possibly the theft of Apollo's cattle by Hermes might be suggested; but Hermes was an infant at the time, and then Herakles is depicted on the other side of the vase. On the whole, until some better suggestion is made, I stand by my interpretation. The satyr seems to shew some relation to a satyric play, or a comic rendering of myth. Our vase—and there I agree with Dr. Pernice—is more probably Attic than Sicilian; but it was found in Sicily, and was very probably made for a Sicilian. The date of a vase so conventional is not easy to fix, but it would probably be the sixth rather than the fifth century. This is rather too early for Epicharmus, but not for the kind of comedy in which he excelled.

P. GARDNER.

AN ATTIC GRAVE LEKYTHOS.

[PLATE XIV.]

PENTELIC marble. Total height, 113 cm. Height of body, 96 cm. Of figured space, 47 cm. Circumference round the bottom of figured space, 116.5 cm.

The upper part of the neck and the whole of the handle are missing.

This beautiful marble grave lekythos, which I have received kind permission to publish from Dr. Kastriotis and M. Stais, is now in the National Museum of Athens (No. 2584). It was discovered in the year 1904 in the house of Spiliotis near the *σφαγεία* on the left bank of the Ilisos.

The vase itself is considerably broken, and the surface of the marble is unfortunately a good deal damaged, but in spite of this, at the first glance, one is struck by the beauty of the whole composition of the relief which covers more than half of the body of the lekythos. This relief is interesting also for its subject matter, which, as far as I am aware, has no exact parallel; a somewhat unusual fact, for on the whole there is not very much variation in the scenes and motives represented on the Greek grave reliefs.

A technical point to be noticed is that the figures are not, as is generally the case on these lekythoi, just in slightly raised relief from the surface, but the whole relief is set back in a frame-work, so to speak, the feet of the figures resting on the lower rim, so that the whole makes a very pleasing finished effect.¹ We must imagine the addition of colour, of which no traces are now visible, but which we know was considerably used to carry out details and as a finish to works in relief as well as to sculpture in the round, both in the early and later periods of Greek art. The hair of the figures was almost certainly coloured, and in all probability the garments also and the shoes. Some of the Attic grave reliefs are of special importance owing to the fact that they are among the few original works preserved to us in which traces of this colouring are still actually visible. Take, for example, the stele of Aristonantes;² in this we still see faint signs of red inside the shield, blue on the background and green on the shoulder clasp of the mantle. Also a small stele Ath. Nat. Mus. No. 892,³ in which distinct traces of red are to be observed on the hair of the little girl.

¹ Other marble lekythoi with a similar technique are No. 819 Ath. Nat. Mus.; Conze, *Attische Grab-Reliefs*, Taf. ccciii. No. 1059; also Conze, No. 294, Taf. lxx.

² Ath. Nat. Mus. 738 Karydissa, and Conze, 1151.

³ Conze, 840, and cf. *Ann. Mus.* 1885, p. 240, note 1.

To return to the *lekythos*, we see that the lower part of the neck is decorated with a painted design, and remains of the graceful palmette pattern carried out in dark red are still visible. It is possible that the base was ornamented in the same way. We must now study the human figures and the scene depicted in this relief. There are four persons represented. The left hand figure is that of an elderly bearded man (Plate XIV., Fig. 1), turning towards the right, that is towards the centre. He is clad in a chiton, and over this is a mantle covering only the lower limbs, and this seems to have been held in place on the left side by the staff on which the man is leaning. His legs are crossed and there is no doubt from the position of the right hand that it was holding the staff, which must, however, have been carried out in colour, as there is now no trace of it visible. He seems to have a narrow fillet round the head. He is resting his chin on his left hand, an attitude which we find constantly occurring on grave reliefs, and which is probably expressive of grief. The corresponding figure on the right is that of a woman (Plate XIV., Fig. 3), also turning towards the centre, and in the same attitude as the man; she is resting her chin on the right hand. She has a long chiton and over this a kind of mantle which falls in folds down the left side from the left shoulder, but leaving the right shoulder free is taken under the right arm and passes in folds across the waist; the end hangs over the left arm, which is held against the side, the hand resting flat on the folds in front. The woman's hair is cut almost short, reaching not quite to the nape of the neck.

A figure which shows many points of resemblance to the one in question is that of Mynno.⁴ This latter stele belongs without doubt to the same period as the *lekythos*, and there is so much similarity between these two figures, that we might almost attribute them to the same artist. For instance, the hair is very similarly treated to that of Mynno, being, like it, cut short and without a parting. There is resemblance, too, in the expression and in the shape of the faces. The garments also have points in common—notice for instance the treatment of the small folds of the chiton round the neck in front, and the way in which the stuff clings to the body, shewing the outlines of the breasts very distinctly.

Turning now to the two central figures of the group, we cannot but be struck by the grace with which they are represented as well as by the simple charm of the little scene enacted. On the left stands a youth, hardly past the age of boyhood, the body shewing but slight muscular development. The upper part of the body is nude, and round his lower limbs is a mantle reaching almost to the ankles; it is caught up on the left, and he seems to be holding it against his side with the fingers of his right hand, in the palm of which sits a little hare, which he is grasping by the ears with the left hand. On the right, turning towards the centre, towards the youth, is a younger woman, evidently of an age about corresponding to his. Her garments are exactly similar to those of the other woman standing

⁴ Berlin Catalogue, No. 737, and Furtwängler, *Coll. Sabourry*, Bd. I. Taf. xix.

behind her, whom I have already described. There is a difference, however, in the way in which the younger woman's hair is dressed; it is not cut short, but gathered up into a knot at the back, where it is held in place by a broad band which passes round the head and is divided in front into three narrower bands, one of which rests on the forehead, the others on the hair which is shewn in between them. This seems to have been a very usual fashion for younger women. Compare for example the stele of Hegeso,⁵ where the hair is very similarly treated, though a little more elaborate.

The two central figures of the lekythos seem to be advancing towards each other, for each has one foot drawn back behind the other, with the heel off the ground. The girl's right hand is slightly extended, perhaps with the intention of taking the hare from the youth. Between the two is a stool, one of the ordinary *diphroi*—a very usual piece of household furniture which answered the purpose either of a seat or a table. See, for instance, the seats of the gods on the Parthenon Frieze, and numerous examples of painted vases where the *diphros* is represented either as table or seat (see especially on the white-ground grave lekythoi).

We now come to the interpretation of the whole scene represented. It is doubtless capable of several explanations, but the one I would suggest as the most likely is the following. The two figures in the centre are probably brother and sister, both having died young, perhaps at the same time, and the two persons on either side are the father and mother, mourning their dead children. On many of these marble lekythoi,⁶ as on other grave stelai, we find the names of the persons inscribed above them or beside them, but here we have no such identification. It is very usual on grave stelai to find the survivors who erected the monument themselves portrayed, as well as those in whose memory it was put up. It may be considered that the woman on the right is more likely intended to be a servant or slave, owing to the fact that her hair is short (a style very customary for servants); but we know that women frequently cut their hair as a sign of mourning,⁷ and probably this explanation holds good in this case, that the mother is represented with short hair, as significant of grief. Difference in age between women is seldom, if ever, represented on these grave reliefs, so the fact that here there is no distinction of the kind need be no reason against accepting the theory that the woman on the right is the mother probably of both the youth and the girl; and there can be little doubt that the elderly man is the father.

The hare which the youth is holding needs some explanation. It is clear from other reliefs as well as from various vase-paintings that a hare was one of the favourite and most usual pets and playthings of the Greek youths, and was evidently almost as much of a domestic animal as the dog or the cat. On several grave reliefs erected to the memory of a youth, we find him

⁵ Conze, Bd. I. No. 68. Taf. xxx. and
Brunn-Bruckmann, *Denkmäler*, No. 436.

⁶ Cf. for example, *Ath. Nat. Mus.* No. 1064,
Lekythos of Metrodora, Philia, Mya and Moles,

and many others.

⁷ See Furtwängler, *Coll. Sabourot*, stele of
Mynno, Taf. xix. and Text.

represented with a hare, evidently as one of his favourite playthings. For instance in the Athens National Museum⁸ is a youth leaning against a small pillar on which sits a hare. Also in the Athens National Museum the stele of Telesias.⁹ We find a hare constantly depicted on vases on which are painted scenes from the palaestra. For example, an amphora,¹⁰ on one side of which is a youth, evidently a victorious athlete: attached to his wrist hangs a hare. Also a red-figured kylix,¹¹ showing a scene in the palaestra, where one group is composed of an elderly man handing a hare to one of the young athletes.

On the other hand we know that the hare was one of the symbols of love, and one of the animals sacred to Aphrodite,¹² and in this way connected with Eros.¹³ There is a relief¹⁴ in the Villa Albani, representing Aphrodite throned, while under the throne crouches a hare. The animal under the throne of Aphrodite on the coins of Nagidus is however not a hare, as it has been called, but a mouse or rat.¹⁵

In vase-paintings the hare is constantly given as an attribute of Eros. For example the well-known vase¹⁶ in the British Museum: on one side we have Odysseus and the Sirens, on the other side are three Erotes, one carrying a hare. Also in the British Museum is a lekythos on which Eros is represented hovering over an altar, holding a hare in both hands. There are many other instances, which it would take too much space to mention. I merely quote these examples proving the connexion of the hare with Eros, as this fact makes another explanation of the scene we are studying possible, although I think not preferable to the one already suggested. The two central figures might be regarded as being intended to represent two persons either betrothed or perhaps lately married—the young lover or husband has died and is depicted as handing over a symbol of his love to her from whom he has been parted.

It is possible that the girl is not going to take the hare from the youth but that she also held some object in her right hand—a flower or bird perhaps, which, having been carried out in colour, is now no longer visible; but, judging from the attitude and general demeanour of the two, the other theory seems the more likely one, and we probably have the brother and sister represented as they were in their lifetime with the plaything they had enjoyed in common.

Before considering the question of date there is one other interesting point to notice about this lekythos. We have already observed that there are no names inscribed as is very often the case, but on the lower part of the

⁸ Kavradas, No. 794, and Couze, ii.² Taf. clxxvi.

⁹ Kavradas, No. 898, and Couze, ii.², Taf. cxviii.

¹⁰ Gerhard, *Griechische Vasenbilder*, Bd. II. Taf. cclxxv.

¹¹ Gerhard, Bd. II. Taf. cclxxviii.

¹² See Furtwängler in Roscher's *Lexikon*, Bd. I. p. 378.

¹³ Furtwängler, *Eros in der Vasenmalerei*, pp. 14 and 15.

¹⁴ Müller-Wisseler, *Denkmäler aller Kunst*, Bd. II. Taf. 24, note 257.

¹⁵ *Ibid.* note 258^a; see B. M. *Coins, Lycaonia*, etc. pp. xliii, and 113.

¹⁶ *Mus. d. I.* I. 8 and B. M. *Poss.* iii. No. 440.

neck are two words inscribed, still quite legible. These words are ΟΡΟΣ ΜΝΗΜΑΤΟΣ which translated literally must mean 'the boundary or boundary stone of the monument,' in this case of the tomb. It is curious to find this inscription¹⁷ occurring on one of the actual grave monuments, and, as far as I am aware at present, this is the only instance of its use in this way. Only one explanation of this seems possible and in order to find it we must consider briefly the known facts concerning the graves and burial grounds of the Greeks. We know both from excavations and from literary sources¹⁸ that from very early times it was the custom, especially in Attica, for the members of one family to be buried together in one piece of ground, and a monument, in early times a tumulus, then later stelai, statues, etc., was erected. In many parts of the country there are also rock-cut graves which evidently must have served the same purpose. These family graves were enclosed by a wall, and traces of these walls are still visible in different places, especially in Brauron and Vari.¹⁹

Until the law of Solon was passed forbidding the custom, people were buried within the towns; the possessors of a plot of land would probably use part of it as a family burial place.²⁰ After Solon's time the graves were outside the city walls, generally along the sides of a much used highway, as for instance along the Sacred Way leading from Athens to Eleusis. The families rich enough to do so would buy a piece of ground, usually make a slightly raised terrace surrounded by a wall, and within this space set up a monument or more than one to the memory of the different members of the family.²¹ Traces of these walls may still be seen in the Dipylon at Athens; for instance part of the polygonal wall in the shape of a half-circle is still standing round the monument of Dexileos which was part of a family tomb. There is no doubt that these tombs were often very plentifully and richly decorated: stelai with or without a relief, lekythoi and leutrophoroi, as well as life-size statues or a group in an aedicula—all these different forms of monument were possible, and probably sometimes within one enclosed space there may have been an example of each; even the slaves of the family were also sometimes represented as mourning their masters.²² So we must suppose that our lekythos was also a monument belonging to one of the large family tombs either in Athens itself or in some other place in Attica, and for some reason which we cannot definitely explain the words ὅρος μνήματος were engraved on it to mark the boundary of the particular tomb to which it belonged. Perhaps this family tomb was not surrounded by a wall as was usual, and so in order to keep it distinct from the next grave, these words were engraved on the lekythos which stood at the edge, instead of on an ordinary boundary stone which we should expect to find used for the purpose.

¹⁷ For the latest list of such inscriptions see Tillyard, in *B.S.A.* xi, pp. 67 f.

¹⁸ E.g. Demosthenes, *Eubulid.* 28 and 57.

¹⁹ See Furtwängler, *Introd. to Collection Sabouroff*, p. 29.

²⁰ See Becker's *Charikles*, iii. Excurs. zur 9ten

Scene.

²¹ See E. Curtius, *Geschichte der Stadt Athen*, p. 204.

²² See Furtwängler, *Coll. Sabouroff, Text and Plates*, 15, 16, and 17.

In conclusion—a few words as to the date of the work, a question which it is not difficult to decide. The relief is in every respect characteristic of the latter half of the fifth century B.C., of the school of Pheidias, and has many traits in common with the Parthenon Frieze as well as with other grave reliefs belonging to this period. For each figure on the lekythos we can find a counterpart in the Parthenon Frieze: to the women with their garments clinging almost as if damp to the body, we need but compare the seated goddesses or the maidens carrying the stools on the east frieze. On the same side we find an elderly man, a citizen leaning on his staff, and beside him a youth, both of whom distinctly recall the father and son of the lekythos, and indeed, throughout the whole frieze, there are numerous figures which afford a comparison to these two.

We have already instanced the relief of Mynno as belonging to the same period; another grave relief, although of much bigger dimensions, which shows very similar workmanship is in the National Museum, Athens;²² there is great similarity in the way the persons are standing, in the folds of the garments, and especially in the not very skilful treatment of the hands and eyes. M. Kavvadias ascribes this relief to the middle of the fifth century, and I should be inclined to date the lekythos a little later, probably nearer the time of the Parthenon Frieze.

I may add that these marble lekythoi seem to have been a favourite form of monument at this time, for on examination I think we find that nearly all these lekythoi found in the various museums date from this period—the middle to the end of the fifth century, before the beautiful aedicula-shaped monuments, which have come down to us as beautiful examples of original work of the great art of the fourth century in Greece, came into vogue.

SILVIA M. WELSH.

²² Kavvadias, No. 716; *Compt. Rd. I. Taf. Ixix. No. 293.*

SOME SCULPTURES AT TURIN.

[PLATES XV.-XVII.]

DURING a visit to Turin last autumn to photograph the so-called 'Diadumenos,' which is here published, I believe for the first time, I took the opportunity to photograph one or two other works which seemed to be interesting. The photographs of these are published with the 'Diadumenos' in this paper. The discussions added to the descriptions of them are not intended to be complete, nor are they, I fear, perfect. My excuse is my desire to make interesting sculptures accessible to those better fitted to criticize them. In preparing this paper I have received much kind help from Dr. Amelung, who has most generously placed at my disposal many of his notes, especially as regards the list of replicas of the Praxitelean Athena, which is entirely his own.

1. Young male head of athlete.¹ (Pl. XV.). H. 285 m., depth of head 24 m., distance between corners of eyes 125 m., length of face 195 m., of mouth .06 m. Greek marble. Restorations: tip of nose; lips, chin, right cheek and brow, and hair are all damaged.

The head is turned a little to its right, and looks downwards. Over the brow is a slightly swelling bar. The lines of the eyes and mouth are firm and hard. The cheeks are also very hard in modelling. The long, loose curls, which fall over the forehead, are carefully parted in the centre. The loose ends of the hair are worked with the drill. The hair in general is in long, thin strands curling tight at the ends. At the back the hair is braided each side into two plaits which are taken round the head on either side, and cross one another in front above the parting. The ends pass along to above the ears where they are then tucked under, and hang down over each ear.

From the drilling of the hair, and the incised treatment of its lines, the surfaces of eyes, mouth and cheeks, this head is clearly a copy of a Greek bronze original.

¹ Dutschke, 52 (he wrongly calls the head female); Furtwängler, *Meistertwerke*, p. 448. Id. *Masterpieces*, p. 247 (he calls it male, but misunderstands the hair and says the head is a Diadumenos); Amelung, *Rev. Arch.* 1904, II. p. 324, 1.

As regards the style and the date of the original it is not easy to form an opinion. In connexion with it Furtwängler suggests the name of Cresilas, thus dating it to the third quarter of the fifth century. Amelung denies its relation to Cresilas and says it is a good example of the mixture of Attic and Polycleitan art towards the end of the fifth century. These two views, though apparently conflicting, both depend on the same idea, the mixture of Attic and Polycleitan art in the later fifth century. This is clearly stated by Amelung, and is the essential theory that underlies Furtwängler's conception of Cresilas' artistic career. He says² Cresilas was a Cretan artist, who was first attracted to the brilliant Athens, and later, on the outbreak of the Peloponnesian War, migrated to Argos. Thus the essential point of these two opinions is the same, that in this head we find a union of the Attic and Argive styles of the later fifth century.

A brief examination of some of the details of the head will show how far this idea is correct. The first noticeable point is the careful parting of the hair over the centre of the forehead. This occurs in the Doryphoros and Diadumenos, and in all the other works attributed to the Polycleitan school. In the free plastic handling of the hair it resembles the Diadumenos rather than the Doryphoros, and therefore shows the influence of the later rather than the earlier Polycleitan style. The parting of the hair, the mass of locks over the ears, and the plaits wound round the head find analogies in statues assigned to the Attic school. The Choiseul-Gouffier Apollo and the charioteer of the Palazzo dei Conservatori³ both show this to some extent. These features recur in the Cassel⁴ Apollo and the Apollo of the Museo delle Terme.⁵ A somewhat similar rendering of the hair is seen in the young male head or the double herm at Madrid, which Furtwängler calls an Eros after Pheidias,⁶ and in the heads, which are both the same, of a double herm in the Barracco collection.⁷ We can thus see that both Attic and Argive influences are present in the Turin head. The arrangement of the hair in the double plait, whether it be the *krobylos* or not, is Attic,⁸ as are also the thick masses of curls over the ears. The extremely careful parting and the free plastic rendering of the hair, which, though handled as a mass, yet shews each individual lock very clearly, are Polycleitan. The rough surface of the plastic locks finds its parallel in the hair of the Diadumenos⁹ rather than in the smoother style of the Doryphoros. Again in the square, solid outline, the head is very similar to the Diadumenos. But the heavy jaw, the decided lines of brows, nose, and mouth have no relation to the soft beauty of the Polycleitan work. The face is strong and vigorous: the texture is hard, but well rendered to indicate firm flesh over a strong backing of bone. This is not Argive in character, but shows all the qualities of Attic art which are noticeable in the later metopes of the Parthenon.

² *Masterpieces*, pp. 116, 243.

³ *Bull. Com.* 1888, Pl. XV., XVI., Hebig⁶ 615.

⁴ Furtwängler, *Masterpieces*, p. 192, Fig. 80.

⁵ *Id. Ibid.* p. 50, Fig. 8.

⁶ *Id. Ibid.* p. 67, Fig. 20.

⁷ Hebig, *Coll. Barracco*, Pl. XXXV., XXXVa.

⁸ v. Schreiber, *Ath. Mitt.* 1883, p. 246 seq.; Studniczka, *Jahrbuch*, 1896, p. 246 seq.

⁹ Cf. Furtwängler, *op. cit.* Pl. XI.

Thus there seems to be rather more of Attic than Polycleitan in this head, and we may attribute it to an Attic artist who fell under Argive influence and who flourished in the last quarter of the fifth century. It was just about that period that the various local styles were becoming merged to produce the fine Greek style of the fourth century. No sculptor can be mentioned as the probable artist of this head: nor can a name be given to it. We only know that it is male, and may be an athlete or an Apollo.

2. Torso of Athena.¹⁰ (Pl. XVII, 1) H. 1.25 m. Coarse grained white marble (Parian?). Head, right fore-arm, and left foot are broken off. The right shoulder is reset.

The goddess stands on her right leg. The left leg, which is slightly drawn back, is free. The left arm is bent, and the hand rests on the hips. She is clad in a long chiton, a himation which is passed over the left shoulder and wrapped tightly round the body. The aegis is worn crooked, inclining to the left side.

In execution and style, this is a very good copy of a well-known type of Athena. It is impossible to date the copy, but it is early, rather than late. The drapery, though worked with the drill to some extent, is well and naturally handled. The Gorgoneion on the aegis, which is, as far as can be seen, of the pathetic Hellenistic type, has probably been modified by the copyist.

This Athena type, of which the Turin statue is a replica, has been attributed by Amelung¹¹ to the Praxitelean school. The best example is the famous bronze in the Museo Archeologico at Florence.¹² The full list of replicas is as follows:—

A. Castle Howard, Michaelis, *Ancient Marbles*, p. 326, 4; Reinach-Clarac, p. 229, 6.

B. Rome, Palazzo Giustiniani, *Gall. Giustiniani*, Pl. V.; Reinach-Clarac, p. 232, 5.

C. St. Petersburg, Hermitage, Kieseritzky, *Katalog*, No. 155; Reinach-Clarac, p. 235, 7.

D. Oxford, Reinach-Clarac, p. 236, 1.

E. Ince-Blundell Hall, Michaelis, *Ancient Marbles*, p. 338, 8; Reinach-Clarac, p. 237, 4.

F. Oxford, Ashmolean Museum, Michaelis, *op. cit.*, p. 546, 20; Reinach-Clarac, p. 238, 4.

G. Rome, Coll. Pamphili; Reinach-Clarac, p. 291, 6.

H. Rome, Palatine, fragment (breast and left arm) in substructures of palace of Septimius Severus; Matz-Duhn, 628.

I. Rome, Forum by Shrine of Juturna, found in 1900 by Temple of Castor and Pollux; *Not. d. Scavi*, 1901, p. 114, Fig. 73; *Röm. Mitth.* 1902, p. 80.

¹⁰ Dutschke, 53.

¹¹ *Basis des Praxiteles*, p. 16 *seqq.*

¹² Amelung, *Führer d. d. Ant. in Florenz*, 248.

K. Fermo, found in theatre in 1853, lower part of body, *Ann. Inst.* 1858, p. 134, Pl. I, 1; Reinach, *Répert.* ii, p. 679, 7.

L. Benevento, headless statue; *Not. d. Scavi*, 1904, p. 111, Fig. 4, p. 112 above, p. 128, No. 2.

M. Rome, lower part of good replica seen by Dr. Amelung in the hands of the dealer Sangiorgi in 1905.

N. Paris, *École des Beaux Arts*, statuette, neck to knees, head and arms were set in; Reinach, *Répert.* ii, p. 292, 8.

O. Turin (the present replica).

The most noticeable point is that the marble replicas differ from the bronze in wearing the aegis obliquely across the breast, while in the bronze it is worn evenly and in the centre. On the general grounds of style the type may be assigned to the fourth century. From its resemblance to one of the Muses on the Praxitelean basis from Mantinea it is attributed to the Praxitelean school. It is not, however, an absolutely original work. The origin of the type is to be seen in the Athena Campana,¹² which is a copy of a fifth-century work. A certain element of eclecticism is introduced, and the type seems thus rather academic than inspired. Also it has a bronze character, and the original was probably bronze. This is perhaps strange for a Praxitelean work. But, though *marmore felicior ideo et clarior fuit, fecit tamen ex aere pulcherrima opera*. The number of replicas and the excellent style incline us to assign it to a good school, and to consider it a well-known work. The circumstantial evidence is in favour of its Praxitelean origin, yet there are the above plausible reasons against it. It may thus be attributed to a follower of the Praxitelean school, perhaps to one who came under the master's influence rather than to a direct pupil.

3. Youthful male Torso. (Pl. XVII 3) H. 1.26 m. Greek marble. The head, both arms from shoulders, and the right leg from the knee are lost. The left shin is badly damaged, and there is a deep cut (modern) in the right side of the stomach. Farther the drapery on the left side has been broken away, and that on the right badly damaged. Part of the neck is left, and has been reset.

The right leg seems to have been almost entirely free. The left leg rests on the toes and ball of the foot, and forms the main support of the figure. The head looked upwards to its left. The right arm was dropped and the left raised. Over the shoulders is a chlamys, which flies out behind, and hangs down in moving, wavy folds. The body is very flatly rendered; all the muscles are slurred, and blended together. Little or no detail is distinguishable. The anatomy of the body is merely hinted at; and the bones are entirely masked by the soft flesh. The body is long and narrow; and the chest is not very broad. The pose, however, is graceful, and well treated. In comparison with the poor execution of the body, the drapery is

¹² Now in St. Petersburg; Amelung, *op. cit.* p. 18, Fig. 4.

excellently handled. The texture is very well indicated, and the folds and movements are well rendered. Since the drapery is so good, and since the figure is supported at the back by a tree-trunk, we may readily assume that the statue is a copy of a bronze. The position of the figure and the movement of the limbs all indicate that it is rising up into the air. This immediately suggests the Ganymede of the Vatican,¹⁴ attributed to Leochares. There is some similarity in movement between them, but the position of the limbs is not the same. So it is impossible for the two figures to be derived from the same archetype, and the Turin figure cannot be a Ganymede since the eagle is lacking.¹⁵

Stylistically the Turin statue may be assigned to the later fourth century. The excellent working of the drapery, the graceful movement, the soft rendering of the slight form, all favour this date. The slurring of detail in the muscles of the body and limbs is probably due to an unskilful copyist. There does not seem to be any similar figure yet known and consequently it is at present only possible to suggest rather than definitely determine its place in the history of Greek art.

The nearest parallel to the treatment of the torso is the Apollo Belvedere. There is in both the same rhythmical handling of the limbs, and the same gliding motion. We have already compared the attitude of the Turin figure to the Ganymede, and thus the three fall together into one group. But Amelung,¹⁶ the latest to examine the Apollo Belvedere closely, believes that it has nothing to do with the Ganymede, whose artistic descent as regards the head he traces from the Turin head discussed above.¹⁷ Perhaps an even closer parallel to the Turin figure is to be seen in a dancing Satyr at Naples, which has been assigned by Furtwängler to Leochares¹⁸ because of its likeness to the Ganymede. In both the body is slim and graceful, the limbs have a gliding motion, and the whole figure rises into the air. Consequently we should probably follow Amelung in separating the Apollo Belvedere from the Ganymede, and group with the latter the Naples Satyr, as already done by Furtwängler, and this Turin figure.

4. Head of athlete.¹⁹ (Pl. XVI) H. 27 m.; depth of head 20 m.; distance between outside corners of eyes 10, from chin to forehead 175 m. Greek marble. The top of the nose is restored. The head, which is very square, was turned up to its left.

The eyes are deep set, rather under the brow, which is well modelled, flattening out at the ends, but is heavy and fleshy. The mouth is short, and the lips drawn in a little and very firm. The jaw is square; the chin is dimpled, and prominent. The hair is in short, grained locks brushed flat a little along the forehead, and in disorder over the rest of the head. There are

¹⁴ Helbig², 387.

¹⁵ It might possibly be a dancing figure: if so it cannot be a dancing satyr since the torso is not satyric in character.

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¹⁶ *Rev. Arch.* 1904, II. p. 325 *seqq.*

¹⁷ *Op. cit.* p. 334; v. above p. 236.

¹⁸ *Satyr aus Pergamon*, p. 14, Pl. III. 2.

¹⁹ Dütschke, 151.

short whiskers before the ears; and the bar above the brow is strongly marked. The work is fresh and clean, and has every appearance of being either a second-rate original, or else a fair copy of a good marble original.

This head, though it in some respects resembles the Apoxyomenos, is far more developed in style, especially as regards the hair. The nearest parallel is perhaps the head of the so-called "Jason" or athlete fastening his sandal.²⁰ To this, as represented by the Fagan head in the British Museum,²¹ it has considerable likeness. This type shows the Lysippean style of the Apoxyomenos more developed, but not so far developed as the Borghese warrior. Thus between the two extremes of the Apoxyomenos and the Borghese warrior we may place the "Jason" and the Turin head. The latest date is more or less fixed, since it is almost universally agreed that Agasias, the artist of the Borghese warrior, flourished at the end of the second and beginning of the first century B.C. If we follow the usual view and regard the Apoxyomenos as Lysippean, the Turin head would be dated to the later third century. On the other hand, if we, with Percy Gardner,²² believe the Apoxyomenos to be post-Lysippean, the date for the head under consideration would be the first half of the second century.²³

5. Statuette of priestess of Isis. (Pl. XVII. 2) H. 40 m. Greek marble. The left forearm and the whole right arm are broken off; and the whole figure is badly weathered. The back is unworked.

The priestess rests on her right leg, the left leg being free. She wears sandals; and is clad in the usual long robe peculiar to the cult of Isis. This seems to consist of a wide sheet-like robe wrapped round the body so that the two upper are crossed at the back and drawn forward over the shoulders to the breast. There they are knotted together in connexion with the upper edge of the robe, which is drawn up to meet them. But it is not clear how the two ends are knotted together with the edge. In this case the end over the left shoulder has slipped free, and leaves the left breast bare. The left arm is raised; perhaps it held a sistrum. The head is thrown back and the eyes are closed, as though in intoxication or religious frenzy. The smooth grained hair is parted in the centre, bound by a fillet, and hangs down all round in corkscrew curls. In the centre of the fillet is a hole, probably for the attachment of the badge of Isis. The cheeks are fat, and the eyes very deeply set, but so softly rendered as to lose all definite form. The treatment of the small mouth is similar. The figure is well built, well modelled, and in a natural pose; and on the whole the statuette is a dainty and life-like work.

²⁰ *Michellia, Ancient Marbles*, p. 104, 85, illustrated.

²¹ A. H. Smith, *Cat. iii*, 1785, other replicas: head and torso, Athens, Acropolis Museum, *Att. Mitt.* 1896, Pl. IX., 1, E-F, 783, 784; head, Jacobson Coll. 1981a; torso only, Louvre, Brunn-Brockmann 67; Munich, Furtwängler,

Katalog, 287.

²² *J.H.S.* 1905, p. 234 *supp.*

²³ To the same group we can probably assign two athlete statues in Berlin, *Beschreibung d. nat. Skulp.* 469, 471; = *Anleitung, Rom, Mitt.* 1905, p. 148, figs. 5-7.

The Egyptian type and the Greek rendering of the statuette immediately suggest an Alexandrian origin, since it bears no relation to the usual Roman statuettes of Isis and her priestesses. There is a small class of somewhat similar Græco-Egyptian statuettes that has been discussed by Amelung.²⁴ There are a Hermaphrodite at Florence,²⁵ a priestess at Ince-Blundell Hall,²⁶ and another priestess formerly at Catajo.²⁷ This group is noticeable for the fine modelling of the figures and the natural treatment of the drapery. The fine folds of the thin garments cling round the body, emphasizing its beautiful forms, and, falling naturally to the ground, add a delicate grace to the statuettes. The three statuettes also show *morbidezza* in the treatment of face and nude portions. But in none of them is the *morbidezza* so marked as in the Turin figure. In it the modelling of the face, especially the eyes, is so soft that no decided lines are visible, and there is thus no definite division between individual features in the face.

As also definitely Græco-Egyptian in character, and therefore Alexandrian in style, Amelung has grouped four heads, a female bust in the Uffizi,²⁸ a head formerly in a dealer's hands in Rome,²⁹ a basalt head at Vienna,³⁰ and a less important head in Berlin.³¹ To these we may add one of the two heads in the Magazzino Archeologico just published by him, the head of an Egyptian princess wearing a cap made of a vulture's skin.³² These five all seem to show an Egyptian character in a Greek rendering, like the statuettes; still they do not possess the *morbidezza* so noticeable in the latter. But a large number of small heads and statuettes of Egyptian provenance possess this soft character.³³ Yet we must not assume, especially since several of the Græco-Egyptian works do not show it at all, that this *morbidezza* is the essential and distinguishing characteristic of Alexandrian art. On the contrary, it seems, as I have elsewhere tried to show,³⁴ to have been a feature common to all Greek art of the later third century B.C. It is, as Amelung³⁵ says, derived from the Praxitelean style, and we find it not only in these Alexandrian works, but in sculpture from other parts of the Greek world. The best example is the famous female head from Pergamum³⁶; we find it also present in the Artemis from Tralles at Vienna,³⁷ the Aphrodite at

²⁴ *Bull. Com.* 1897, p. 110 *seq.*

²⁵ Uffizi, *Sala delle Iscrizioni*, Dutschke, 275.

²⁶ Furtwängler, *Statuenkopfen*, p. 33, 34, Pl. V.; Michaelis, *Ancient Marbles*, No. 24.

²⁷ *E.-F.* 57, Amelung, *op. cit.* p. 122, 1; similar figure Vatican, *Mus. Ch.* 654; Amelung, *Pal. Mus. Cat.* Pl. 81.

²⁸ Amelung, *Führer d. d. Ant. i. Florenz*, 157; *repl. Louvre, Clavier*, 1074, 2474, No. 62; Arndt, *Porträts*, 219, 220; Rome, *Pal. Græciani*, *Bull. Com.* 1904, Pl. III.

²⁹ *E.-F.* 179, 180.

³⁰ von Schnitzler, *Album d. Ant. Sammlung*,

Pl. XIII.

³¹ *Beschreibung d. ant. Skulp.* 331; Arndt, *Porträts*, 217, 218.

³² *Bull. Com.* 1897, Pl. VIII.; Helbig, 735.

³³ *E.g.* those referred to by Amelung, *Bull. Com.* *loc. cit.*; cf. Botti, *Museo d'Alexandria*, i. 23, 30, 31, 33, 34, 36-39, xiv. 9, 12, 14.

³⁴ *Brit. School Annual*, ix. p. 236 *seq.*

³⁵ *Bull. Com.* 1897, p. 138.

³⁶ Collignon, *Pergame*, p. 204; cf. the Dionysos published by Varnall, *J.H.S.* 1890 p. 167.

³⁷ von Schnitzler, *op. cit.* Pl. VI.

Olympia,³⁸ the Warren head from Chios,³⁹ and to some extent in the Aphrodite from Tralles at Smyrna.⁴⁰

And so, though we may assign the Turin statuette from its character as a priestess of Isis to the Alexandrian school and date it from the later third century, it should be remembered that its style, the tendency to softness which it illustrates so well,⁴¹ was common to all Greek art of that period.

ALAN J. B. WACE.

³⁸ *Olympia*, iii. Pl. LIV.

³⁹ Burlington Fine Arts Club, *Cat. Exhib. Greek Art*, Pl. XXXII.

⁴⁰ *Partwängel, Masterpieces*, p. 297, Fig. 174;

E. F. 1342, 1343.

⁴¹ Cf. *Phidl. Rom. Mitt.* 1904, p. 1 seqq.

THE MIDDLE MINOAN POTTERY OF KNOSSOS.

[PLATES VII.-XL]

IN the sketch of the pottery of Knossos that appeared in the *Journal of Hellenic Studies* for 1903, pp. 157-203, it was sought to give a general account of Knossian ceramic development on the basis of such finds as were to hand up to date.

Since then, however, further evidence has been accumulating such as serves to bring into clearer outline particular phases in development. This happens to be specially true of the Middle Period. The object, accordingly, of the present paper, which I undertake by kind permission of Dr. Arthur Evans, is to examine the new ceramic materials in so far as they are illustrative of the successive phases of Middle Minoan ceramic development.

The results of a special examination of the pottery found in Early Minoan deposit up to date are to the effect that the two kinds of ground, respectively light and dark, coexist from the very beginning of the use of paint in Cretan ceramics.¹ Thus it can no longer be a question of the one kind of ground supervening upon the other at any later stage but only the problem of the relation to each other, throughout the course of their collateral development, of two kinds of background which co-exist from the beginning and so co-exist in virtue of a technical principle which is as old as any decorative art. This principle is that any kind of design is itself possible only through a difference in shade between the design and its background. The design, whatever its colour, must appear lighter than its background or darker. And given a certain set of media: the difference of dark or light in the background conditions the difference of light or dark in the design. Decoration with one kind of ground may come into greater prominence at certain periods than that with the other, but as a matter of design in its widest aspects both kinds of ground will always be found in course of time to emerge into co-existent use to some degree, because the architectonic alternation of light and dark grounds is a primary necessity in the development of decorative art.

¹ See *B.S.A.* x. 21, 22, 26.

From this point of view the Early Minoan Age may be regarded as the era of the genesis of colour-technique itself and the two kinds of design emerge alongside of each other and develop into their simplest difference from each other, as monochrome design respectively on a light and on a dark ground. The time of fusion which marks the first transition to polychrome effects of style has not yet come and there is as yet no true synthesis of light on dark with dark on light such as later formed the true achievement of Minoan decorative art. When we come to the great days of the Middle Period we see that the highest decorative synthesis is one in which light and dark grounds alternate regularly with each other.

Before we enter at all on any discussion of Middle Minoan Ceramics we must bear steadily in mind one result of a careful examination of Early Minoan wares, which is to the following effect:—There is no difference of style corresponding to the difference between light and dark grounds, for the style of ornament in any given phase of development is the same whether on a light or on a dark ground.

This primary unity of style which is indifferently of the same simple geometric character, whether it develops in the medium of light or of dark grounds, is a traditional survival into the Middle Period on which every later phase of development is founded.

1. In the early part of the Middle Minoan Age the elements of ornament are found to be still largely derived from the repertory of the previous era, and like these they are prevailingly geometric in character. Alongside of these, however, other elements begin to emerge which are indicative of a new tendency, that towards curvilinear variation in the designs. This double fact of partial identity with and difference from the prevailing manner of the earlier period as a whole becomes clear at once if we glance at Pl. VII. The fragments were found in the Basement with Monolithic Pillars, *B.S.A.* ix. 18, Fig. 7, in the same deposit in which in 1900 was found the Dove-Vase, *J.H.S.* xxi. 79, Fig. 1, which accordingly also belongs to the early part of the Middle Minoan Age. The deposit underlay the floor-deposits with fine polychrome ware, to which belong the fragments in *J.H.S.* xxiii. Pl. VII, as also the fine cup, *ib.* Pl. VI. 4.³

Here many of the fragments present hardly more than adaptations of a geometric repertory that itself goes back to Neolithic times, and has survived continuously throughout the Early Minoan Age. In this connexion fragments 1-5 and 14-16 are particularly instructive. There is not a combination here that does not repeat well-known Neolithic motives; for example, the sets of parallel bands forming zigzag angles in No. 1, the triangles filled out with white in imitation of Neolithic white-filled punctuations in Nos. 3 and 4.

It is important to note that next to the dull cream-white the colour that most prevails in these early polychrome fragments is a red pigment that varies between vermilion and terracotta, and which is itself an element in

³ Our Pls. VII. and VIII., like Pls. V., VI., VII. in *J.H.S.* xxiii., are after drawings by Mr. Halvor Bagge.

colour-design that is seen already, if sparingly, in use in the Neolithic Age. In the Early Minoan Period it is seen as a rare variant for white in light-on-dark design in deposits of the same era as that of Hagios Onouphrios. Fragment 2 shows us this red combined in one scheme with white in a geometric design that is itself of Neolithic origin. The geometric motives in the same colour in 3, 4, and 5 are equally primitive in manner and in origin. The orange variants in 7, 8, 11, 12-15, 17, 18, with their growing tendency towards a purer yellow are later in origin than the primitive reds with which they are seen here in contemporaneous use. The earlier elements in the colour repertory are not superseded by their later variants and rivals, but tend to survive alongside of these. And the variants derive their interest in the design from the differences of tone they introduce in colour-schemes whose polychrome character is essentially the outcome of a natural combination of later with earlier elements of colour. When once a colour has come into use it tends to survive in all combinations in which it has ever formed an element. The elements only die out with the disintegration of the polychrome combinations themselves of which they have formed a part, and this itself is but an organic process in which the process of the integration of the colour-elements is reversed.

In the process of combination of later with earlier elements of colour with which we have here to do, it is curious to note that the elements of geometric design that preserve the earlier Neolithic traditions are apt to survive in their original colours. Thus, for example, the simple Neolithic motive of fragment 1, the dotted triangular fields of fragments 3 and 4, and the lattices of fragments 4, 7, 11 are all elements from the Neolithic repertory that have survived continuously in their original white. The early motives in red and black present us with a similar story of survival. Thus red next to white tends to reproduce in their original character the greatest number of motives from the Neolithic repertory of ornament as seen, for example, in the red parts of fragments 3 and 4. Black-glaze design in its original genesis has involved a transformation, in its development of light grounds, which tends to reproduce the geometric elements of ornament in a guise which is more frankly Early Minoan. In this case, even when the motives themselves are actually Neolithic, the treatment of them tends towards a freedom in which the rigidity of Neolithic tradition is seen in process of gradual disintegration through translation into media which, in their colour-effect of dark design on a light ground, were a transformation into the opposites of what they were in Neolithic technique.

The beginnings of curvilinear design, as compared with the geometric tradition, represent a recent element which is entirely lacking in the Neolithic Era, and which so far has only been observed in Early Minoan deposit of the maturest period. In the beginnings of the Middle Minoan Period the use of simple curvilinear motives appears already to have become traditional, though in strict subordination to the still dominant geometric style. Among these curvilinear motives the wavy bands in dull cream-white, in fragments 5 and 19, form a very early element in design, and there

are analogies for it in the pottery of Egypt of the prehistoric age.² The cable chain of fragment 20 appears advanced in comparison, and yet it occurs on geometric pottery from Gourniá belonging to the close of the Early Minoan Age.

From the point of view of polychrome development, however, in its relation to traditional survival the most interesting fragments are Nos. 17 and 18 from the neck and shoulder of jug-vases of the same shape as those from Knossos in the *B.S.A.* ix. 95 Fig. 65, *p*, and 97 Fig. 66, *b, d, f, g*. The decoration on the neck is the same for our fragments and for the vases, that is, sets of parallel rim- and neck-bands in a lustrous brown-to-black glaze on a highly polished buff clay slip on terracotta red clay, hand-made. But, instead of the plain dark-on-light 'butterfly' motive on the body of the vases, our fragments have the elaborate light-on-dark polychrome geometric design illustrated in the plate.⁴ Another similar fragment from Knossos, Pl. IX. 6, shows for the body a conservative style of light-on-dark polychrome geometric decoration with a traditional survival of time-honoured Neolithic and Early Minoan motives closely approaching that on fragments 3 and 4. At first sight it might seem as if the vases represented by the fragments with the polychrome design on the body must necessarily be later in date than the plain vases with the simple dark-on-light 'butterfly' motive and that our fragments represented the process by which light-on-dark polychrome design gradually displaced the simple dark-on-light. That this is not so becomes clear on consideration of the fragments shown in Pl. IX. 1-5, which are from the same deposit as the fragments on Pl. VII. The second fragment here is the neck and shoulder of a vase with 'butterfly' motive dark-on-light which in its lustrous brown-to-black glaze, polished buff clay slip, and terracotta clay, is exactly similar to the polychrome fragments. With the Dove-Vase again came out the interesting fragment of a jug with polychrome body of Pl. IX. 6 referred to above as of one class with Pl. VII. 17, 18. It was only in 1903, however, on complete excavation of the Basement with Monolithic Pillars, with the discovery of the floor-deposit with the ware of Pl. VII. underlying a later floor with fine polychrome M. M. II. pottery, that the true context to which belongs the ware of Pl. VII. was realized. Then also the complete similarity between Pl. VII. 17, 18 and Pl. IX. 6 made it clear that this fragment and with it the Dove-Vase from the trial-pit of 1900 really belonged to the same deposit and so to the same M. M. I. context as the ware on Pl. VII. The vases represented by our fragments as well as the Dove-Vase are, however, besides so similar in clay, glaze, and general technique, as to have been probably from the

² The spiral repeated as a unit but not as a chain also occurs in the prehistoric pottery of Egypt and it is possible that it is from here it drifted into the Aegean. It occurs in the early geometric pottery of Palaeokastro and Gourniá. The chain of connected spirals occurs apparently first in the Aegean at some time early in the

Middle Minoan Age.

⁴ The M. M. I. 'butterfly' motive itself is the direct descendant of the hatched triangles in pairs joined at the apex so common in the previous Third Early Minoan Period. See *B.S.A.* x. 198 and 199, Fig. 2, *d, i*.

same workshop, if not by the same hand. And this again would only show that the same potter worked simultaneously in light and in dark grounds.

The interesting and curious set of fragments fitted together as No. 3 on Pl. IX, belonging to a jug like No. 2 but larger, from the same deposit and probably also from the same workshop, with similar lustrous dark glaze design on a polished buff clay slip and clay, may of itself serve to show how popular was the light-ground style at the period to which the dark-ground polychrome fragments on Pl. VII belong, and how far we are from any real transition from the one style to the other. The subject of the design in its naturalistic character is so advanced that were it not for the company in which the fragments occur we should be tempted to assign it to a much later age. To the right appear the heads (in one case the upper part of the body as well) of three Cretan wild goats with curving horns moving in profile to the right.² Behind them also moving to the right is a curious beetle-like creature with tail. The figures of the goats are in silhouette with incised outlines filled in entirely with lustrous black glaze in a manner that recurs in the black-figured style of archaic Greek vase-painting. The 'beetle' is painted in a very free manner without outlines. The glaze, the polished buff clay slip and the clay are exactly like those of the polychrome fragments which combine a dark with a light ground. The painted hatched bands of the two fitted lid-fragments of No. 4 in matt cream-white on a brown glazy surface and the incised hatched bands of fragment 1 seem at first sight much too primitive for such company as No. 3 with the Cretan goats. Yet there is no doubt that they belong to the same context, though on the other hand each of them in a different medium preserves into this period a favourite Early Minoan design which itself has its origin in the Neolithic Age. The survival of such early elements alongside of new factors in the development of design is very characteristic; and fragment 1 has above and apparently also below the incised band a double pair of parallel bands with a meander band between them, in the dull-coloured early matt cream-white, which is a new combination. Here again, if we take fragments 1 and 4 together, we have an illustration of the law already referred to, that the elements of design that preserve the earlier traditions tend to survive in the earlier media. In the Neolithic Age the white pigment is never found disjoined from the incision. This process of disintegration and separation takes place in the Early Minoan Age. But the separated elements do not die out. In accordance with the organic law of survival, each of the elements gets a new lease of life on its own account in a new environment. In the early part of the Middle Minoan Age the examples in question show us such separated elements still surviving each on its own account, and entering into ever new combinations in which each again, in accordance with the primitive law of organic survival,

² Compare the seal impression, *B.S.A.* ix. 20, Fig. 9, for a wild goat with somewhat similar curving horns. Our earlier picture has

already in common with the original seal the profile movement to the right which is so popular in Minoan Art.

continues in the tendency to preserve its own identity in the midst of all the growing diversity of a polychrome age.* The white lattices of Pl. VII. 4, 7, 11 furnish a striking illustration of this tendency.

The principal shapes presupposed by the fragments on Pl. VII. can best be understood by reference to Pl. IX. 6-15. Here the two-handled spouted jugs 13, 14, illustrate the shapes presupposed by the fragments 1-7, 9, 10 on Pl. VII. The cups 9-12 on Pl. IX. give the general shape presupposed by the fragments 11-16 though the latter are of much finer quality. Spout 6 with a light ground presupposes a vase with a polychrome body and dark ground like the fragments 17 and 18 on Pl. VII. The shape of vase presupposed by all these spouts is figured in *R.S.A.* ix, 95, Fig. 65, *p.*, Fig. 66, *b, d, e, f, g.*

The vases shown in Pl. IX. 6-15, which are from the same deposit as the fragments on Pl. VII., once more illustrate the general phenomenon, on which we have been insisting, of the complete parallelism in time of light and dark grounds in the Middle as in the Early Minoan Age. Vase 14 here has a dark ground, but vase 13, of similar shape and in precisely similar glaze and clay, has light-on-dark panel bands all on a light ground. This panel arrangement of vase 13 with the light ground dominant is as near a synthesis of alternating light and dark grounds as we ever come to at this early stage of the Middle Minoan Age. The light neck with dark polychrome body presupposed by fragment 1 on the same plate is not a synthesis but a compromise. The fragmentary cup 7 from the same basket looks distinctly advanced for the context in which it occurs. It is decorated with crescents arranged in horizontal rows alternating cream-white and vermilion-red, all on a very lustrous black glaze slip on terracotta-red clay, which is hand-made. The crescent design is the same as that of the cups, *J.H.S.* xxiii. 176, Fig. 3, 1-3. But whereas the crescents in the case of these cups, in accordance with their later character, seem to have been stamped, the crescents on our cup betray certain irregularities in the design which show that they were painted on by hand. The combination of vermilion and white is also an early characteristic.

One of the outstanding features of Middle Minoan ceramics is the large use made of relief-work of different kinds to enhance the richness of the grounds in polychrome decoration through the added play of light and shadow. It is accordingly only an accident that on Pl. VII. we have only one specimen representing this tendency, fragment No. 13. This is part of the rim of a cup probably with a foot, like fragment 16. The cup, which is hand-made, has two parallel orange rim-bands on a lustrous purple-black glaze slip forming a broad rim-band on the inside of the cup on finely sifted dull buff clay. Below the orange rim-bands appears a series of serrated ridges going obliquely up right in very fine buff clay paste which has been laid on over the glaze. From the North Quarter of the City comes a two-handled

* The grain found along with the jugs with 'butterfly' motive shown in *R.S.A.* ix, Fig. 65, *b* affords the curious spectacle of a survival into

this period of the original Neolithic white-filled incisions alongside and independently of their differentiated elements.

spouted hole-mouthed jug which is of great importance in this connexion on account of the context in which it occurred. This vase has its shoulder decorated with an elaborate system of parallel ridges going obliquely down left, then right, then left again on the fine buff surface of the clay. The ridged zone has going along it at intervals groups of three parallel bands going down left then right in herring-bone fashion, in a thin purple-brown semi-lustrous glaze like that which covers the rest of the vase inside and out.⁷ This jug belongs to the same company as the very characteristic series of vases shown in Pl. X. In this connexion has to be mentioned the rich deposit of vases with blistered surfaces 'à la barbotine' found by the Italians at Hagia Triada in the chambers of a building just outside and above an important tholos-tomb with Early Minoan remains.⁸ These vases like the building in which they were found are later than the tholos and its vases, while their special affinities show them to belong to the same early part of the Middle Minoan Period to which we have assigned the series of vases shown in Pl. X. from the North Quarter of the City at Knossos. Thus item 7 here represents a vase which in type and general style of decoration comes very close to the vases of the barbotine style referred to. The sets of oblique parallel panel bands are common to our vase and to many of the barbotine vases of Hagia Triada. On the Early Minoan prototypes of these vases, the panel bands in question are arranged vertically as in *B.S.A.* x. 201, Fig. 3, b. The relief-decoration of our vase in the form of knobs is, however, much simpler than the blistered surfaces of the Hagia Triada vases, and the knobs indeed survive into a period when the barbotine style itself was no longer in vogue. This fact of survival comes out very clearly when we find the same motive so copiously used on the characteristic knobbed pithoi of the Third Middle Minoan Period both from Knossos and from Phaistos.⁹ In this connexion Pl. X. vase 1. is of special interest. This jug shows us the knobs combined with the 'trickle' motive in the First Middle Minoan Period in a manner which is intrinsically the same as that illustrated by the knobbed pithoi which themselves again belong to the end of the Middle Minoan Era. The large white dots of items 5 and 7 recur alternately with red and black ones on the blistered ware of Hagia Triada and both in white and more rarely in red and black represent a favourite motive in the Second Middle Minoan Era. The rope-band in incised relief of items 3 and 4 is a very favourite collar motive in the early part of the Middle Minoan Age, but it does not seem to have had any later history.

⁷ *Mon. Ant.* xiv. 699, Fig. 9 shows the fragment of a vase in the same barbotine style as our Pl. VII. 13 and the vase from the North Quarter of the City at Knossos referred to above. The rippled appearance of this particular style suggests an earlier phase in the process of development, which later became stereotyped in the painted rippled surfaces of M. M. III. and L. M. I.

⁸ For this tholos-tomb see *Memorie del r.*

Istituto Lombardo, xxi. 248-252. The tholos-vases, Tav. ix. Figs. 21, 22. The barbotine vases, Tav. vii. Fig. 16. Compare also for Knossos the two cups with blistered surfaces in *J.H.S.* xxiii. 167, Fig. 1, items 5, 6, which appear in a similar M. M. I. context.

⁹ See *B.S.A.* x. 10-12, Fig. 3; XI. 218, note 2; *Ann. Ist. Lomb.* loc. cit. Tav. xi. Fig. 29.

while in origin it can have had no real connexion with the elaborate rope-decoration of the knobbed pithoi of a later time just referred to. The vases of Pl. X. illustrate very well the alternation of light and dark grounds so characteristic of the Middle Period as a whole.

The survival into this era of the tradition of incision apart from its earlier white filling is in itself a very interesting phenomenon, and reference has already been made to the tendency of such surviving elements to persevere in their own identity in the midst of all the change and diversification of phenomena which are so characteristic of the Middle Minoan Age. The extreme of the tendency of such separated elements of decoration to preserve their own identity is well represented, so far as the technique of incision is concerned, by the one-handled jug shown in Pl. X. 8, which has no other ornament than the systems of hatched incised bands on the brown-red surface of the clay. The context to which the vase belongs is shown not only by the characteristics of its companions in the second and third rows below it, but by the recurrence of such knobbed specimens as Nos. 9 and 10 next it, which again are but common variants of the knobbed vases of Pl. X. 1, 7. The vases of Pl. X are all from the same North Quarter of the City.

On Pl. XI. 1-20 are represented vases and fragments of vases found (1905) on an important floor of a house to west of the Palace belonging to the same early part of the Middle Minoan Period as the floor-deposit to which belong the fragments on Pl. VII. Adjacent on the north side was a house with the rich deposits of M. M. II. ware illustrated in the Report, *B.S.A.* x. Fig. 4. This M. M. II. house had cut into the area occupied by the earlier house, obliterating its deposits yet without touching the parts outside its limits to the south occupied by the vases of Pl. XI. 1-20. Several of the types from the floor-deposit of the Basement with Monolithic Pillars recur here and do not call for special remark. The 'fruit-stand' vase, dark-on-light, No. 12, is, however, a new shape for this period at Knossos, and is interesting as representing in an intermediate phase of development the prototype of the tall fruit-stand vases which are so frequent in the immediately following era (M. M. II.).¹⁰ The undulating band which finishes the decoration of the bowl below is frequent, both light and dark, in the Middle Period and recurs as the base-decoration of many vases of the Palace Style in the Late Minoan Age.

Decoratively the most interesting vase from the deposit is the handsome jug Pl. XI. 1, which is reproduced in colour in *B.S.A.* xi. Pl. I. This jug is essentially of the same type as those with the 'butterfly' motive and their polychrome variants though considerably larger in size. The elaborate polychrome design is concentrated on the upper half and particularly on the shoulder of the vase.¹¹ Just below the middle is a broad band in

¹⁰ See Hogarth-Welch, *J.H.S.* xii. 87, n. 38. Figs. 15, 16; *B.S.A.* ix. 308, Fig. 8.

¹¹ It is possible now to conjecture that this was probably also the case with the polychrome

vases just cited in comparison which are presupposed by the 'curious fragments' shown in Pl. VII. 17, 18 and Pl. IX. 5.

madder-red bordered above and below by a narrow band in matt cream-white. Below this again half-way towards the base a very broad band is 'reserved' in the pale buff ground of the clay. Above and again below the main design is a rather wide vermilion band. On the neck is a collar-band in madder-red bordered above and below by a narrow matt cream-white band. Above this, on neck and rim respectively, is repeated the vermilion band motive of the body of the vase. On the spout is a band in matt cream-white. The top of the handle has narrow oblique bands in matt cream-white, going up right, in imitation of a twisted basket handle. On the shoulder as fundamental element in the main design is a zigzag series of double axe-like figures with the contour in madder-red bordered on either side by a narrow cream-white band, and having the central field filled out with dots in matt cream-white which are reminiscent of the Neolithic white-filled punctuations.²² The continuous interval between the units in the zigzag series is filled out with a winding meander-band in vermilion. All on a purple-tinted lustrous black glaze slip on terracotta-red clay with red and black sand-like particles in it, hand-made. Height 28 c., base diameter 19 c., shoulder diameter 22 c.

The kind of process of disintegration by which the stiff geometric or quasi-geometric motives of an earlier age were rendered fluent, and in turn induced the tendency to further fluency of curvilinear treatment in detail, is well illustrated by this vase. The double axe-like figures look like imitations of metal or bone inlays, and of course the form and decorative arrangement of such inlays were largely independent of the rigid geometric tradition.²³ Thus, given the shapes of these and their serial oblique relation to each other, the outcurving ends of one fit in with the incurving sides of another in a way which conditions the curvilinear meander character of the connecting vermilion band, at the same time that this meander seems to condition their oblique relation to each other in a regular alternation of outcurving ends with incurving sides.

The tendency to concentrate the main design on the shoulder, which comes into prominence at this time, is one that grows with the elaboration of the sense of architectonic principles, which themselves in the last instance are conditioned by the inherent forms of vases themselves, these being dependent in their turn on the kind of use to which the vessels are put. The upper part of the vase as it swells outward to the shoulder is by its nature more important than the lower, and its visual prominence naturally marks it out for the

²² Compare the white punctuations of Pl. VII. items 3 and 4, and of Pl. IX. 6 and, for the continuity in tradition, Early Minoan examples like *B.S.A.* x. 199, Fig. 2, *h*, *j*, and Neolithic originals, such as *J.H.S.* xliii. Pl. IV. 15-17, 21, 25, 27, 30. The cup, *ib.* Pl. VI. 2, shows the white punctuated band motive of the Neolithic fragments 15, 16 surviving into the M. M. II. Period. The zigzag in white of the alternate bands on this cup looks equally early in origin, and it seems at length to attain

to decorative finality once for all as rim-band to the beautiful cup *ib.* Pl. V. 2. Compare the Neolithic fragments *ib.* Pl. IV. 22, 25, 31. The lines of white punctuations in a single series of these fragments recur in the M. M. I. and II. Periods, as in Pl. VII. 7, 8, 10 and Pl. VIII. 5-8, 11, 18, 20.

²³ Polychrome double axe-like figures arranged vertically occupy an analogous position on the beautiful M. M. II. bowl shown in *J.H.S.* xliii. Pl. VI. 3.

main part of the design. Thus in the distribution of space the upper field receives a greater portion of this than the lower, and the dividing line tends to come below the middle rather than above. In this way the inartistic impression which is invariably created by an exact bisection of the field is avoided through the visual subordination of the lower to the upper part.

This architectonic distribution of horizontal zones on a vase may in its origin be the result of influences that are largely adventitious and unintentional in their relation to the aesthetic result. Thus the horizontal zones may very well owe their actual origin to the ease with which horizontal bands are produced on a vessel revolving on a rotating disc in course of decoration if not of actual manufacture. Later, as we know, the use of the wheel must have given a powerful impetus to the use of this kind of zone-decoration; but the wheel as such cannot explain the origin of such design, if this origin is traceable back beyond the first use of the wheel. However the result may have been produced, yet the result itself when once achieved is one that henceforth survives largely in virtue of its aesthetic fitness. It is thus not a little remarkable that this system of decoration now fully inaugurated in this earlier part of the Middle Minoan Age, though in apparent antagonism to the opposing principles of vertical panelling and asymmetrical arrangements that were so current in the great polychrome period, survives henceforth as a guiding principle of ceramic decoration through all the later Minoan periods, and after that into the Classic Age of Greece. This decorative principle has indeed already attained to perfect balance in the beautiful and elegant M. M. II. cup shown in *J.H.S.* xxiii. Pl. V. 2.

If the different sets of vases and fragments of vases described above be taken together, the historical conclusion is possible that they all belong to one period: the earlier part of the Middle Minoan Age (M. M. I.). This is proved partly by their constant occurrence immediately underneath deposits—often floor-deposits—of the Second Middle Minoan Period and sometimes above deposits of the Early Minoan Period *in genere*, partly by the constant occurrence, along with the variants, in all the deposits, of typical vase-forms such as (1) the ring-foot and footless cups with broad band below the rim respectively light-on-dark or dark-on-light; (2) hole-mouthed two-handled spouted jugs dark-on-light and light-on-dark with characteristic geometrico-curved polychrome tendencies; (3) spouted one-handled jugs of the type with 'butterfly' motive and its polychrome variants.

The principal deposits of this period identified up to date are:—

(1) The deposit of the Dove-Vase in the Basement with Monolithic Pillars (1900 and 1903) Pls. VII, IX.

(2) The deposit found in what we are now able to identify as the M. M. I. Well underlying a basement of the East Wing of the Palace to west of the Court of the Spout (1901 and 1902). The series shown in *J.H.S.* xxiii. 167. Fig. 1 is from this well-deposit.

(3) The pit-deposit found in 1903 under the floor of a passage opening northwards off the East Pillar Room. See *B.S.A.* ix. pp. 94-8 and Figs. 55, 56.

(4) The important floor-deposit of houses belonging to the North Quarter of the City of Knossos and affording a clue as to the great expansion of the city in this direction in the early part of the Middle Minoan Age, Pl. X.

(5) The important floor-deposits of a house on the west borders of the West Square of the Palace which contained the vases of Pl. XI. 1-20 (1905).

(6) A set of vases and vase-fragments found (1905) in a pit-repository immediately underlying the floors of the M. M. II. constructions in the north-east region of the Palace in which in 1902 were found the fine polychrome vases *J.H.S.* xxiii. Pl. V. 1, 2, 3; Pl. VI. 1, 2, 3.

All these deposits, with the exception of that of the well, are either floor- or pit-deposits. As such they are indicative of the occurrence of a catastrophe through which they got covered up before they could be removed. As the vase-types are uniform with variants in the different deposits in which they are found, and as the sudden arrest in development indicated by the abandoned floor-deposits is found to be exactly simultaneous in regions so far apart as the Palace and the North Quarter of the City, we can conclude with safety that the catastrophe was a universal one, and that the different deposits simultaneously submerged by it represent the stage in development arrived at in Minoan ceramics at the close of the period which ended with this universal catastrophe.

With the 'reservation' of part of the light buff ground of a vase towards making it serve as a colour-element in polychrome decoration, which is exemplified by the broad horizontal buff band on the lower part of the vase last described, we have an instance at this early period of a technical finesse of ceramic decoration, which from this time onward is destined to play a prominent rôle in the history of Minoan vase-painting. Henceforth throughout the polychrome period the widest use is made of this curious technical device, and in the Late Minoan Age the practice of 'reservation' becomes so wide-spread as at last entirely to supplant the use of light colour on a dark ground. But it is not merely in such simple instances as this band-motive that even in this early part of the Middle Minoan Age the practice of this device is exemplified. We may not call the light-ground necks of the polychrome vases represented by fragments 17 and 18 on Pl. VII, or the light panels alternating with dark ones of Pl. IX. 13, true instances of such 'reservation'; yet in any instance in which the 'reservation' has been consciously designed by the potter to have its special colour-effect as an element in the polychrome scheme, the decorative function of the device is manifest. Fragment 19 on Pl. VII is indeed in this and in other respects so elaborate in its decorative treatment as to be a surprise in the context in which it occurs. It presents a vertical panel combination of a light with a dark ground in a manner which is no longer a compromise with earlier fashions, as was the case with the style of vase to which belong fragments 17 and 18, but a true synthesis of the two styles. In such a synthesis the dark ground may be dominant or the light, or again the dark and the light parts of the ground in relation to the more linear parts of the polychrome ornament may appear in such balance as themselves to be integral functions in the scheme

of decoration. This kind of synthesis was the highest achievement of the succeeding era.

2. On Pl. VIII. we have a series of polychrome fragments with a light ground from the 'North-West Pit.' In comparison with the earlier series of fragments on Pl. VII. several determinate differences emerge. (1) The geometric elements of design appear subordinate or latent. Curvilinear motives are dominant. (2) The colour-combinations are seen at a higher organic stage of development in relation to light as to dark grounds, whether these occur as separate unities or in synthesis. (3) This synthesis itself presents the highest stage in achievement, and it reflects historically the polychrome palace style of this period, in which light and dark grounds must have appeared in regular synthetic alternation in the finest decorative schemes in the wall-paintings as in the ceramic art of the period.

That we are a considerable way advanced beyond the manner of the earlier period becomes clear by a mere glance at the fragments on Pl. VIII. This advance in style, however, is never at the expense of any violent break with earlier fashions. Thus we need not be surprised to find in the wheel and the latticed circle of fragment 3 a pair of old favourites that have survived continuously from Early Minoan times and are trying to disguise themselves now in the polychrome finery of the day. This has been with only very partial success in the case of the prim-looking latticed circle. It has not really changed colour at all, but has retained its original dark hue alongside of a double in white that is also found putting in a very early appearance in the Middle Period.¹⁴ There is no doubt, however, that the white lattice in itself has an older history and that it is truer to its Neolithic connexions than the black lattice that begins to appear alongside of it in the Early Minoan Age.¹⁵

In the case of the greater number of the fragments on Pl. VIII. it can be said at once that the design is dark on a light ground. In the case of others, as for example, Nos. 4, 11, 17, 18 light and dark grounds are so equally balanced in one complex polychrome design as to be a true synthesis of both kinds of ground. In others again, as 12, 16, the ground as a whole may be regarded as dark with light ground appearing in details as part of the design. The dark ground is also dominant in Nos. 14 and 15, though here again the design itself may be regarded as a wide dark border on a light ground. In any case we have to distinguish between grounds that are light or dark as a whole and those that are light or dark in details. Grounds that are light or dark in detail become themselves intrinsic elements in the design and this new possibility leads to new combinations in the use and distribution of the colour schemes.

Thus, to take light-ground details. In these the light buff intervals alternating with dark ones, as in fragments 4, 12, 16, 17, 18, become *ipso facto* a new colour-element in the design itself. Again, to take dark-ground elements.

¹⁴ For a white latticed circle of this kind at the M. M. I. stage see *E.S.A.* ix, 95, Fig. 65, q.

¹⁵ For the lattice motive at the Early Minoan stage see *E.S.A.* x, 105-6, Fig. 2.

In these correspondingly the dark-ground intervals alternating regularly with the light ones become combined with the light design upon them in such a way as to form one of the colour-elements in this design itself. Thus fragments 4, 5, 10, 12, 14, 16, 17, 18, give us combinations of black with two other colours for the design, if in these instances the ground is regarded as light. In fragment 4 we have combinations of three design-colours in synthesis whether the ground is regarded as dark or as light.

In fragments 13 and 17 we have an entirely new finesse in colour-effect. Both have boss-ornament in relief, the highest points of which allow the buff of the clay to appear through in a manner which repeats the high metallic points of light on bronze originals.

Finally the colour-schemes themselves have become richer in their repertory of tones. As the fine creamy buff surfaces with or without slip, polished or unpolished, emerge more and more as an element in the designs, the dull cream pigments tend to transform to a paler white. The vermilion-tinted orange has beside it a paler yellow, the vermilion-tinted reds subordinate themselves to pale pink, terracotta-red, cherry-red, red-brown and purple-brown. Paler or warmer tints of buff clay and variations towards purple-brown or metallic purple-black glaze become consciously sought out in the grounds. The imitation of metallic high lights in relief may appear as points of white colour on dark glaze grounds, whether in the flat or in relief, or sometimes of the pale buff of the clay itself allowed, as in the instances referred to above (fragments 13 and 17), to appear through the lustrous black glaze of the ground. This variety of resource in the use of colour, in combination with the new variety introduced by means of the growing tendency towards curvilinear design, is what distinguishes the ceramic art of this period from the earlier manner illustrated by the fragments on Pl. VII. The great underlying fact that is common to both periods is the phenomenon of the co-existence of light with dark grounds, and this regular co-existence of light with dark grounds has been already traced continuously from the borders of the Neolithic Era through the Early Minoan Period to the time of which we speak. Of this continuous co-existence of light with dark grounds we have an emphatic illustration on Pl. VIII, the fragments on which with a light ground have been on purpose selected out of a context in which light and dark grounds regularly occurred together. We never have a period in which dark grounds appear alone, though on the other hand light grounds never emerge into emphatic predominance until the Late Minoan Age. Yet even at that later time the dark grounds are seen surviving as a subordinate factor and they never altogether die.

The greatest achievement of the Middle Period was undoubtedly the synthesis of the two styles to which reference has been made, and if we knew more of the wall-painting of this era we should probably find that this mature polychrome ceramic style was but one phase of a movement towards the synthesis in decorative art of light and dark grounds, which must have received its highest expression on the walls of the Earlier Palace itself. It is not likely that the alternation of light and dark-ground panels was an

invention of the potter alone, though it may very well have been one in which he shared in one common movement of decorative art in which the wall-painter took the lead. The invention was one that was inevitable when once it was seen that the buff clay could equally with the black glaze become an intrinsic element in polychrome design.

The principal ceramic finds of this period at Knossos identified up to date are :—

(1) The floor-deposits of the 'South-East Kamares Area' or area of the Basement with Monolithic Pillars where this deposit was found (1902) superimposed upon the earlier floor-deposit, to which belongs the pottery of Pls. VII, IX. *J.H.S.* xxiii, Pls. VI. 4, VII are from this deposit. See *B.S.A.* viii, Pl. I. 'Earlier Palace'; ix. 18, Fig. 7.

(2) The floor-deposits of the 'North-East Kamares Area'—a system of rooms, underlying the ground-floors of the North-east quarter of the Palace, in which (1902) were found the fine polychrome vases *J.H.S.* *ib.* Pls. V., VI. 1, 2, 3. See *B.S.A.* viii, Pl. I. 'Earlier Palace'.

(3) The floor-deposits from the early basements underlying the ground-floors in the area of the Room of the Olive Press. *J.H.S.* *ib.*, Figs. 4, 5 (1902), and *B.S.A.* ix, Pl. II. (1903).

(4) The floor-deposits of the 'North-West Kamares Area' (1901 and 1903) and the 'North-West Pit' (1904). The pottery of our Pl. VIII is from the latter deposit. See also *B.S.A.* ix, Fig. 75; x, Figs. 5 (1), 6.

(5) The floor-deposits of the Middle Minoan House beneath the West Square (1904), *B.S.A.* x, Figs. 4, 5 (2). This house in the southward direction had partially cut into the pre-existing house to which belong the floor-deposits of Pl. XI. 1-20.

The simultaneous submergence of these floor-deposits was probably the result of a general catastrophe. See *B.S.A.* x. 16.

3. The decline of the polychrome style and the gradual relapse towards simple monochrome design on light and dark grounds is a tendency of the later Middle Minoan Age, which succeeded the general catastrophe referred to above.

The forces which tended to hasten this decline, and simultaneously to inaugurate a new phase in the development of style, have not to be conceived as influences acting from without but as integral moments in a process of disintegration and reconstruction working from within towards which the catastrophe referred to furnished only the occasional cause. This catastrophe did not bring with it the elements of an entirely new style from the outside: it simply acted as a precipitant to a process of development from the inside which was already latently active when the catastrophe came.

The polychrome style in its intrinsic character had grown to its full fruition as the mature outcome of a tendency in which differences of colour were regarded in the light of their decorative effect in their relation to each other. There was no more thought of imitating nature in this tendency than there probably was in the case of the textile fabrics or the decorative parts of the wall-paintings of the period. Colours have harmonies of effect in

relation to each other, quite independently of the juxtapositions in which they are found in nature, and the polychrome art of the Middle Minoan Age is as practical an illustration in point as we have many ages later in the similar principle underlying the polychrome decorative art of Greece. This underlying principle is the same indeed, for that matter, over a much wider field, and is as independent of the mere imitation of nature in a tapestry of Ancient Egypt or a polychrome vase of Crete as in an old Persian carpet or an antique glass of Venice.

Considering the relatively limited scale of colours at the disposal of the Minoan ceramic artist, we have seen this principle of polychrome decoration in the mature period of the Middle Minoan Age reach a high degree of elaboration.

It is just towards the end of this era, however, that we see the beginnings of another tendency coming definitely into play, namely, that towards the portrayal of natural objects. And, as is apt to happen when a growing tendency comes into one sphere of action with one that has already reached full fruition, the new tendency as an evolutionary movement enters into antagonism with the old and strives to oust it from its field of activity. There is no doubt that the new tendency received great impetus through the catastrophe to which reference has been made above, as having occurred at the close of the great 'polychrome' period. After that catastrophe we find polychrome processes in ceramic technique in course of rapid dissolution, while we see the new tendency in full swing, and by the time we again have floor-deposits on a universal scale the new principle is so fully established in ceramic art as almost to have ousted the other.

In decorative wall-painting, on the other hand, the new tendency could effect a reconciliation with the old, for here the growing feeling for nature was able to receive expression for itself only within the limits set by the polychrome principle itself, which in the old-established usage of the time conditioned the general effect of all wall-painting in its decorative function as a whole and in detail.

That it was otherwise in ceramics was the outcome of special conditions and limitations of the art which are absent in the case of wall-painting. (1) Limits of space, which practically do not exist for the decorative wall-painter, tend to compel the vase-painter, in his preoccupation with the portrayal of motives from nature, to substitute such motives for the more purely decorative ones on the more prominent parts of the vase, and to give these so much scope as tend to reduce all decorative free-play to minor details on neck and base. Thus we find these more purely decorative motives surviving just where they are not in the way. The extreme of this tendency is seen in the vases with lily-design from the South-East Magazines shown in *B.S.A.* viii. 90, Fig. 51 (one of which again, *ib.* x. 7, Fig. 1) and *J.H.S.* xxiii. 180, Fig. 8.

(2) Once we have the portrayal of natural objects, such as flowers, which becomes so rife before the close of the Middle Minoan Age, it soon becomes apparent that a scale of colours, which in their relation to each

other were capable of producing polychrome effects of great beauty, was quite inadequate towards the reproduction of the natural colours of objects. Thus green, for example, which is the first necessity towards the rendering of leaves and stems, and which we find in use with the wall-painter, did not exist in the colour-repertory of the vase-painter. The ceramic artist must thus have felt that with his limited scale of colours he could not produce the same natural effects as the wall-painter with his. On the other hand he must have been equally conscious that natural objects such as flowers did not look natural in a polychrome guise which was not that of nature. The only solution of the colour-difficulty in the circumstances was a compromise in the shape of a convention. Thus the tendency came into being to make all natural objects either simply light on a dark ground or dark on a light ground. The beginnings of this process go back to an early period and we have, for example, the Cretan goats of Pl. IX, 3 already appearing as simple black silhouettes on a light ground. Items 1 and 2 on Pl. VIII show us graceful frond and leaf motives, with polychrome details, used with the fine sense of decorative effect so characteristic of the Second Middle Minoan Period. The fine panel jar from Phaestos again, *Mon. Ant. Linc.* xiv, Pl. XXXV, a, shows us an intermediate stage in the process, in which, on a vase that is still polychrome, tall reeds appear on alternate panels monochrome dark on a light ground. The twisted cable pattern in white on the stem, so far removed from nature, only serves to show how much the vase-painter was still under the influence of the decorative traditions of a polychrome style that itself was in process of passing away. The lily-vases referred to above show us the full accomplishment of the process in a monochrome design that is entirely light on a dark ground and yet entirely natural in its treatment of forms.

The finest vases of the Temple Repositories show us the same stage in development. Perhaps the most remarkable example from this series is a two-handled piriform amphora, with plant and flower design light on the usual semi-lustrous purple-black glaze ground. On either side, front and back, in an oval panel is a plant-design with large spreading pointed heart-like leaves. A very freely rendered design of graceful tulip-like flowers on tall sinuous stems is fittingly adapted to suit the narrower interval left below the handles on either side. The free breadth of treatment combined with natural grace that characterizes the decorative style of vases like these was hardly ever again attained to in the ceramic art of a later time, but that the phenomenon was not an isolated one is shown by examples in wall-painting like that of the Crocus Gatherer, and in the art of faience like the crocus panels of the Votive Robes, and the rose- and fern-leaves of the vases in the same material from the Temple Repositories themselves.

(3) In the course of such processes of change any latent weakness inherent in the organic fibre of earlier tradition that is itself in course of dissolution is found all at once to have come rapidly into full view. It has already been suggested that the general catastrophe, which occurred at the beginning of this period, gave a forcible impetus to the processes of change

and after that catastrophe it is equally apparent that the old polychrome decorative technique never again appears at the same high level of achievement as in the previous era. All the polychrome innovations of the finest period vanish with such rapidity after the catastrophe, that we can hardly account for the disappearance except on the hypothesis of a general decline at this time in the methods of polychrome technique itself. A fixity in the durability of the colour-media, which is only of relative moment to the wall-painter, was something of paramount importance in ceramic art. And any falling off in the technical art of fixing the colours on the body of the vase was in itself sure to lead to a rapid falling off in the regular use of these. Thus it probably is that the oranges, yellows, pinks, and crimsons of the great 'polychrome' era are found so entirely to have vanished, and that in the deposits belonging to the end of the new period we have still represented only the original whites and reds, and alongside of these the fundamental dark of the glaze and buff of the clay.

This double fact respectively of the disappearance of the more recent elements and endurance of the earlier functions in the repertory of colours is itself a curious phenomenon of survival. The elements from the old colour repertory that survived into this period were those that had longest established themselves in continual use. Thus white and red survive continuously till now from the Neolithic Period, while the buff surfaces and black glaze ornament and ground are an equally continuous inheritance from the Early Minoan Age.

Coincident with this survival of earlier elements in colour, at the expense in ceramic art of colour-elements of later origin, is the survival in these colours of certain ornamental motives of earlier origin, at the expense of ornamental motives of later origin in later colours. Thus the spiral, itself of Early Minoan origin, survives till now almost invariably in its original white, and only very rarely in red or black. Similarly the Early Minoan cable-band is still true to its original white, and if it is not that it is sure to be in red or in black.¹⁶ The vase from Phaestos referred to above has going down the dark panels a chain of circles joined by transverse tangents that, in a simplified form, has survived in its original white from the Early Minoan Age.¹⁷ Again the early white and red horizontal bands on the subordinate parts of vases are a commonplace survival into the ornamental repertory of this period.

This coincidence in survival between certain functions of colour and of ornament is one that rests upon the mutual relation in which they appear together from the beginning. Otherwise it is not easy to account for the survival of colours like white or red, that from the point of view of durability have in themselves no distinct advantages over the colours that have vanished from the repertory. Those colours survived with the ornamental motives in

¹⁶ For a red and a black cable pattern of this kind at the M. M. II. stage see the polychrome cups in *J.H.S.* xiii. Pl. V. 3 and Pl. VI. 4.

¹⁷ Compare the latticed circles joined by transverse bands of the E. M. III. Period in *B.S.A.* x. 199, Fig. 2. Items *f, l*.

which they traditionally appeared on those parts of a vase, and under those circumstances in which they were not in the way. Thus we have the time-honoured horizontal bands, the spiral chains, and cable-bands on the upper and lower parts of vases, whose main field may be engrossed with the bold innovations of a recent time.

This phenomenon of survival of earlier elements at the expense of later ones is itself, however, a process of disintegration that is at the same time a process of readjustment to new conditions. The earlier elements in colour as in ornament preserve their original characteristics, but once having through disintegration become detached from their traditional environment they are now able to enter into new connexions. Thus, for example, the large spiral band in white on the shoulder of the jar *J.H.S. xxiii. 177*, Fig. 4, is a bold decorative variant for the branch-wreaths of Fig. 5 on the next page. On the Phaeastos vase again the old-world chain of circles connected by transverse tangents of Early Minoan origin in white on the dark panels performs the same decorative function as the new-fangled plant motive in black on the alternate panels with a light ground.

Colours, however, as media have a much greater capacity for entering into new combinations than the ornamental motives that survive in them. The traditional conservatism of ornament in its development is one that always tends to persist in its original characteristics, while the colours that have survived as media with the ornament, provided they are true to their original shade, can easily disconnect themselves from the combinations in which they have survived in order to enter into new ones. The large and growing use at this period of white in the rendering of flower and plant forms, at the entire expense of every other colour except the vanishing red and the glaze-black whose use becomes so dominant in the next era, is fully illustrative of this adaptability of a surviving colour-medium towards entering into new combinations. On the vase from Phaeastos and its interesting companion we find this vanishing red still appearing, now in the primitive cable pattern, now in graceful blossoms and blossom-sprays.

The tendency is already nascent in vases that are still polychrome, for example the branch-bands of the jar already mentioned (*J.H.S. xxiii. 178*, Fig. 5). At this stage, however, the horizontal arrangement of the white branches as a band still betrays the influence of limits set by polychrome architectonic traditions, and it is only the vertical panel that affords excuse for an arrangement more in accordance with nature. In the vase from Phaeastos referred to above we have this panel arrangement, but the reed-motive appearing black on the alternate light panels, the artist has fallen into the curious temptation of further defining his stems, by means of a cable-chain in white going up them which has nothing to do with nature though decoratively it has its full justification in the touch of colour-variety it introduces into the bare black of the stem. Indeed the panel arrangement, alternately light and dark, of this vase has made possible a happy union of time-honoured decorative schemes with the recent motives from the world of plants and flowers which makes us entirely forget questions of origin and

tendency for the sake of the fine polychrome breadth of treatment and architectonic balance of the whole. The equally beautiful companion to this vase (*ibid.* *b*) shows hardly less mastery of architectonic treatment in the decorative subordination of polychrome blossom-sprays and palm-like leaves to a spiral system in white, in an oval panel on a dark ground, whose early connexions are equally forgotten in the fitting grace of the general design. At the end of the Middle Minoan Age, as represented, for example, in the pottery of the Temple Repositories, we have still got the tradition of the alternate vertical panels light and dark and of the oval panels on a dark ground, but the rendering of plants and flowers in white has become so natural as at first sight to seem quite independent of all previous tradition in ornament, and this is true to a still greater degree of the lily-vases already mentioned.

There is, however, a further moment in colour-survival that requires remark. We have seen white surviving with certain ornamental motives, and then detaching itself from its connexion with these and entering into new combinations in the rendering of flower and plant forms. But this is not entirely at the expense of the original connexions. The old connexions are not entirely given up because new ones are formed. The white in its traditional connexion with the spiral, for example, survives alongside of the new combinations in which it appears. The white spiral is of much earlier origin than the white branch, but on the jars referred to above the spiral and the branch in white already appear as decorative variants of each other. At the end of the Middle Minoan Age the white spiral is still popular as the main decoration of a vase, alongside of elaborate decorations in white from nature, as on the outside of the 'candlestick' in *J.H.S.* xxiii. 189, Fig. 8, 2, which occurs in the same context as the beautiful white lilies of the vases (*ib.* 7, 10.¹⁸). The black double of the spiral in white (*ib.* 3) comes more and more to the front at a time when the growing monochrome tendency makes simple dark-on-light the one natural alternative to light-on-dark design. In the Temple Repositories, again, the large spiral decoration in white on the pitcher in Fig. 1, *b*, is so effective as to seem little out of place alongside of the natural twigs in white on a dark panel ground which we have in the same series, *d*. In these repositories the spirals in white continue still to be more popular than the similar ones in black, but the same deposit shows us a vase, *f*, in which a white spiral band on a dark ground on the shoulder may be regarded as more than balanced by a black spiral-band on a much wider light ground on the body of the vase.¹⁹

This example, with its spiral systems indifferently light on a dark or dark on a light ground, is of itself sufficient to illustrate at this stage a

¹⁸ For the 'candlestick' see also *B.S.A.* viii. 91, Fig. 51, 2; 92, Fig. 52.

¹⁹ The spirals here appear as black discs joined by pairs of transverse tangents just as if we had to do with the double in black of the similar motive in white of the pannelled

vase from Phaestus referred to in previous passages. Have we not here indeed the original of the spiral chain itself surviving on its own account alongside of that from the Early Minoan Age?

universal law of the development of style in Minoan ceramics. The style of decoration and the repertory of ornament at any given stage in development are the same whether on a light or a dark ground. Beginning with the Early Minoan Age there is never at any stage any real conflict of motives on a light with those on a dark ground, but only of later motives with earlier ones, whether the grounds are light or dark. In the period at which we have now arrived, that conflict took the form of a struggle between the more



FIG. 1.—MIDDLE MINOAN POTTERY FROM KNOSSOS. TEMPLE REPOSITORIES: M. M. III.
(After *B.S.A.* ix, 50, Fig. 20.)

recent tendency towards portrayal of nature, and the earlier motives from the rich traditional repertory of polychrome ornament, which we see in such brilliant bloom in the ceramic art of the previous era. It is not a conflict of styles disparate in historic origin, as if with the light grounds some influence from without had come to be superinduced upon the native influences from within; for the light grounds have been there from the very beginning of the use of paints in ceramics, and the new influences, if anything, are more

marked on the dark grounds than on the light ones, as the lily-vases have taught us. The conflict is one of a later phase of style with an earlier one, whether the grounds are light or dark; and that conflict in its full antithesis was that between an earlier style of polychrome ornament, which has nothing to do with nature though it has its own legitimate function in decorative art, and a later natural style. This later style, in its convention of simple light on dark or dark on light grounds, threatens the legitimate function in ceramic art of a polychrome principle, which under more favourable conditions still continued to play its usual rôle in the wall-painting of the period.

In this conflict it need not be surprising that many time-honoured elements of ornament managed to survive into the new era, in an environment from which the polychrome colour-functions of more recent origin were themselves in rapid process of elimination. This survival of decorative ornament alongside of the growth of natural motives means no real or intrinsic disparateness in style itself, since decorative ornament in its own sphere is as essential to style as truth to nature in its particular province. The unity of style that results, however manifold may be the moments that make it up, is one whether the decoration is light or dark, and if in the next age the light grounds ultimately triumph under particular and partly accidental circumstances, in the natural course of development the style that results is one that emerges out of conditions that previously were common to light as to dark grounds. In the clash of the processes of change, the conservative tendency of tradition in the development of ornament is apt to receive an exaggerated expression of reaction in the work of individuals as of particular schools, just at the moment when the new influences are winning the day; but from this phenomenon to argue to disparateness of origin as regards different phases of style, that may come into simultaneous contrast at the same time that they are successively unfolding themselves into synthetic moments of each other, is to ignore a principle of antithetic movement that is the very life of all development. It is only a particular form of the same fallacy to argue from the special unity of style that is characteristic of a certain given phase of ceramic art, against the multiplicity of tendency at an earlier stage which has gone to shape that particular unity of style. And a conception of the unity of style which excludes this manifoldness of tendency, simply because we happen not to know all the successive phases in the process of development, is simply an abstraction of our own making.

It is, however, a more serious hindrance to scientific progress when long-established prejudice comes in to darken knowledge. Thus, for example, it has been long assumed after Furtwängler and Loeschke that what it has been usual to call the Mycenaean style in ceramic art was the invention of Achaean or Mycenaean Greeks. It seems labour in vain to insist on the bearing of the Cretan evidence to the effect that the beginnings of the style which is most characteristic of the ceramic art of the Mycenaean Age are found in process of development in the Aegean, at an era preceding by many ages the first appearance of any people of Hellenic race and speech on the mainland of Greece.

The underlying assumption, whether consciously acknowledged or not, is, at bottom, to the effect that the supposed 'Achaean' racial movement which, with reference to the mainland of Greece, is regarded as having originated the Mycenaean Civilization, was an Aryan one from the north. And this assumption has become one of those fixed ideas in archaeology for which it is difficult, by the ordinary normal processes of reasoning, to come to terms with conclusions from actual excavation. Such conclusions make it ever more apparent that the racial movement which resulted in the Aegeo-Mycenaean Civilization was a pre-Aryan one from the south, and that consequently for such a movement the islands became early centres of racial development, which gave them the natural antecedence and precedence in influence over what for such a northward movement was the more outlying littoral of Greece and Italy and Anatolia. The most recent results from mainland Greek centres so far apart as Argos and Orchomenos are quite in harmony with these conclusions. They reveal to us a matt technique in ceramics, which is as wrongly instanced to argue a real disparity of race in the earliest period which preceded all preponderating racial movements from the north, as it is rightly used to strengthen the conclusions as to the outlying tardative character on the continent of a ceramic art whose great progressive centres were in the Aegean world under the growing paramount influence of Crete.

The principal deposits of pottery that up to date have to be assigned to the closing period of the Middle Minoan Age are the following:

(1) A group of vases including one with a graffito inscription found in 1901 in an earlier basement underneath the ground-floors in the south-west region of the Palace. See *B.S.A.* vii. 10-11, Fig. 4.

(2) The ware found in 1901 in the second cist from the west end of Magazine 4 in the West Wing of the Palace. See *ib.* 47, Fig. 14 and *J.H.S.* xliii. 185, 188, 190. This isolated find in the light of later discoveries has now to be shifted back from the position assigned to it in these citations into the same company as the other groups here enumerated. The two-handled piriform jars of this cist are exactly like those of the Temple Repositories.

(3) The pottery of the North-East Magazines from the excavations of 1901. See *B.S.A.* *ib.* 72-4, Fig. 24. From this deposit we have to exclude the pottery found along with a steatite vase-stand (see *ib.* 74) outside the existing west wall of the Magazines, all which belonged to a later deposit formed after the Magazines themselves had got covered up.²⁰ The 'trickle' decoration so common on many of the vases from these magazines is very characteristic of the closing period of the Middle Minoan Age, though its origin, as we have seen, goes back to an earlier time. See *ib.* Fig. 24, 'streaked vases in heaps,' and our Pl. XI 21-23. Into the same context comes the pottery from the floor-deposits of the North-East Hall and adjoining store-closet. In the store-closet was found a pithos with 'trickle'

²⁰ The allusion to Magazine 5 in the passage, and Figure cited in the text rests upon an oversight.

decoration and rope pattern like those of the knobbed *Pithoi* of the East Magazines. There is now conclusive evidence that this whole complex of apartments inclusively of the North-East Hall or Light-well and its staircase as far south as, though probably not including, the corridor going east-west to north of the system to which belongs the Room of the Olive Press, had got covered up before the beginning of the Late Minoan Age. See *B.S.A.* xi. 210.

(4) The ware found in 1902 in the deposits immediately underlying the palace floors in the area of the Room of the Olive Press and superimposed on floor-deposits with pottery of the finest polychrome class in the same area. See *J.H.S.* xxiii. 179, 180 with Fig. 6, 181 and *B.S.A.* x. 6, 8.

(5) The important series of large knobbed *pithoi* with characteristic 'trickle' decoration found in 1902 in a series of early magazines in the area north of the Court of the Oil Spout in the East Wing of the Palace. See *B.S.A.* viii. 10-11, Fig. 5; x. 10-12, Fig. 3. These magazines, whose foundations were laid deep down, had cut into the south end of the older system with rich floor-deposits of the finest polychrome ware such as that figured *J.H.S.* xxiii. Pls. V and VI. 1-3. See also *B.S.A.* viii. Pl. I MNO, 11-12, 'Earlier Palace.' The frequency of the 'trickle' decoration on these *pithoi* is in chronological harmony with its frequency on the jars of the North-East Magazines (above, group 3).

(6) The series of *pithoi* and other vases including those with lilies found in 1902 in the South-East Magazines. See *B.S.A.* viii. 91, Fig. 51; *J.H.S.* xxiii. 189, Fig. 8. Later ceramic discoveries justify the withdrawal of this series from the company in which it appears in the above citations and the bringing of it into one context with the groups enumerated here. See *B.S.A.* x. 7, Fig. 1 and 8, 9, Fig. 2. The two-handled type of tall slender jar with the lilies is essentially the same as that with the 'trickle' decoration of the North-East Magazines. The only difference is that the jars of the North-East Magazines still have their circular hole-spout with lip, whereas this spout in the case of the lily-vases has dwindled to a flat button. This difference in itself, however, does not compel us to put the lily-vases later than the others in date, for, apart from the similar stratification, the continuation of the real spout in those circumstances in which it is of practical use, alongside of the mere ornamental reminiscence of a spout in those other circumstances in which its practical use has disappeared, is one of the commonplaces of ceramic traditional survival. The real spout occurs in the same deposit alongside of still other instances in which external appearances are kept up, though the spout itself when looked into is false, as in the case of some of the *pithoi*. These two-handled spouted *pithoi* indeed are probably themselves in origin derived from the two-handled spouted, hole-mouthed jug so characteristic of the Middle Minoan Age in general. The mediating type probably was a larger kind of two-handled, hole-mouthed jar like those of *J.H.S.* *ib.* Figs. 4, 5. The spout, which was still of practical use in the case of a medium-sized jar, could only have the function of an ornament for a *pithos* too large to be tilted or raised from the ground for pouring purposes.

(7) The ware from the deposit in the area of the Basement of the Monolithic Pillars in which in 1902 were found the two vases with inscriptions in ink described *B.S.A.* viii 107, 108, Fig. 66. This deposit belongs to a stratum superimposed upon that which contained the finest polychrome ware, while adjacent at a higher level were the floor deposits of the Palace. To the same deposit belonged a small pithos with 'trickle' decoration like that of the Knobbed Pithoi and of the jars of the North-East Magazines.

(8) In the 'North-East Kamares Area' ('Earlier Palace'), above the floor-deposits with fine polychrome egg-shell ware, occurred a later stratum, again with clearly marked floor-deposits which contained, among other characteristic pottery, a series of tall slender two-handled jars, lying on their sides, of the same type as the tall graceful jars, with handles below the shoulder, of the cists adjacent to the Temple Repositories, and the other similar jar with graffito inscription from the South-West Basement. See *B.S.A.* *ib.* 117, 118.

(9) The remains of a large knobbed pithos and vases found along with it in the 'Walled Pit No. V' in the region of the Palace north of the north-west angle of the Central Court (1901 and 1903). See *B.S.A.* ix 23, Fig. 11, V.; 26, Fig. 13; 27, Fig. 14; x 10. This knobbed pithos with its 'trickle' decoration was of very similar character to the knobbed Pithoi of the East Magazines.

(10) The important series of vases found in 1903 in the Temple Repositories and in 1904 in the connected system of three cists which run north from the Repositories towards the Antechamber of the Throne-room. See Fig. 1 and *B.S.A.* ix 48, Fig. 23; 49, 50, Fig. 26; 51; x 13, 26-34, Pl. I. The vases of the Temple Repositories were rich in naturalistic motives in the shape of plants and flowers, whose fine feeling for style faithfully re-echoed that of the embroidered flowers on the panels and borders of the dresses of the Snake Goddesses from the same deposit. There is further an exact resemblance to the fine style of the lily-vases of the South-East Magazines. The Temple Repositories and connected cists had spouted two-handled jars with 'trickle' decoration, like those of the North-East Magazines and other vases like the jar with graffito inscription and its companions from the early basements in the south-west region of the Palace and like the tall handsome jars from the 'North-East Kamares Area' referred to above (group 8).

(11) The ware found in 1904 in the latest stratum underlying the pavement of the West Court of the Palace and of the Corridor of the Procession. See *B.S.A.* x 6, 10, 11. The ware found underlying the pavement of the West Court belonged to the floor-deposits of a house built on the ruins of that which contained the fine polychrome ware represented *ibid.* 15, Fig. 4. Here occurred types of vases, with a purple-black glaze ground, resembling those with lilies from the South-East Magazines, and with a buff ground like those having 'trickle' decoration from the North-East Magazines. The pottery found underlying the Corridor of the Procession

again contained the type of the jars with 'trickle' decoration from the North-East Magazines, while their environment brings us back once more to the similar deposit from the adjacent South-West Basement, which yielded the vase with graffiti inscription and its companions (above deposit 1).

The general catastrophe indicated by the simultaneous submergence of the floor-deposits just enumerated may be conveniently taken as marking at the same time the end of the Middle Minoan Age.

DUNCAN MACKENZIE

THE LAST SCENE OF THE EUMENIDES.

At the end of the play, when the Eumenides are to be ushered to their cave beneath the Areopagus, Athena joins to the procession a special escort of her own temple-servants, and sets forth the procession with these words:

αἰνῶ τε μύθους τῶνδε τῶν κατευγμάτων	1022
πέμψω τε φέγγει λαμπάδων σελασφόρων	
εἰς τοὺς ἐνερθε καὶ κατὰ χθονὸς τόπους	
ξύν προσπόλοισιν αἵτε φρουροῦσιν βρέτας	
τοῦμον, δικάϊων· ὄμμα γὰρ πάσης χθονὸς	
Θησῆδος ἐξίκοιτ' ἄν, εὐκλεὲς λόχος	
παίδων, γυναικῶν, καὶ στόλος πρεσβυτίδων	1028
φοινικοβαπτοῖς ἐνδυτοῖς ἐσθήμασι	1029
τιμᾶτε, καὶ τὸ φέγγος ὁρμάσθω πάρος, ¹	1030
ὅπως ἂν εὐφρων ἦδ' ὁμίλια χθονός	
τὸ λοιπὸν εὐάνδροισι συμφοραῖς πρέπη.	

The unsolved questions in lines 1028-1030 are two:—first, how to punctuate them, that is, who are to be the wearers of the crimson cloaks, the Escort or the Eumenides themselves: and second, what is the reason for the crimson colour? Neither question, perhaps, may seem to be of great importance; but Aeschylus is not a poet who does things at random; he is apt to have more than superficial meanings; and enquiry may, I hope, reward us with a new significance.

On the punctuation, which determines who the wearers are, I will say this to begin with; that if the meaning were *a noble troop in crimson raiment*, Greek would require the addition of *ἐν*: e.g. Plut. *Anton.* 44 *ἐν τῇ στρατηγικῇ φοινικίδι προσελθὼν*, Ar. *Lys.* 1140 *λαμπρὸς ἐν φοινικίδι*, Soph. *Trach.* 613, Eur. *Hec.* 464, *Bacch.* 973, Aesch. *Agam.* 1270, *Pers.* 280 *πλαγκτοῖς ἐν διπλάκεσσιν*.² We should be obliged, if this were the meaning, to suppose either the omission of a previous line containing *ἐν*, or an adjective '*arrayed in*'; or else, with Hartung and others, to suppose that *ἐνδυτοῖς* is a mistake for *ἐνδυτῶν*. But upon either of these suppositions we shall be left with *τιμᾶτε* baldly by itself, '*do honour to them*,' without any specification of the

¹ As I would read instead of *παρος*; but this is immaterial here.

² I have explained this much-mistaken phrase in the *Classical Review*, 1902, p. 435.

honour; which has been generally felt to be unlikely. Some therefore have conjectured that the specific honour was contained in a passage lost before τιμάτε, 'honour them,' e.g. 'with the name Εὐμενίδες'; while Paley supposed τιμάτε to be an error for προβάτε, 'proceed.' But (though this reading is adopted by Wecklein in his school-edition) it is most improbable that any scribe, finding in the text of a tragedy προβάτε, should mistake it for τιμάτε.

On the other hand, the words φοινικοβάπτους ἐδυτοῖς ἐσθήμασι τιμάτε 'honour them with crimson robes' hang naturally together, as e.g. *Agam.* 913 θεοὺς ται τοῖσδε τιμαλφεῖν χρεών (with the purple broderies); and *prima facie* therefore it would appear that that phrase is correct, and means that the Eumenides themselves are to be arrayed in crimson.

Why then crimson? Their proper colour, as Chthonic Powers, is of course that of mourning, μέλαινα or φαῖα, as opposed to white, which belongs to the Divinities of Heaven, represented by Apollo: so much is certain, even if we were not expressly told it in the play itself. This question was touched by Karl Ottfried Müller in § 86 of his *Dissertation on the Eumenides*—that admirable work by a truly admirable critic. He has been showing (§ 80) that the Erinyes were not in the earliest ages independent deities. Their function is a chthonic one, and was included originally among those of the Earth-Mother, who in ancient times was widely worshipped under the title of Demeter Erinys. When they disengaged themselves and became separate personifications, it was natural that they should still retain some ritual attributes in common; and among the common attributes that Müller looks upon as traces of original identity is this one of the crimson robe: 'Again, at Athens the Erinyes were clothed in blood-red garments (*Eum.* 1029),² and so also at Syracuse Demeter and Corn, as Thesmophorian Goddesses, wore purple robes, which were put on by persons about to take some dreadful oath.' The passage he refers to is *Plut. Dio* 56: Callirrhoe was required by the women to swear the Great Oath: αἱ δ' ἤξιον αὐτὸν ὁμόσαι τὸν μέγαν ὄρκον. ἦν δὲ τοιοῦτος· καταβάς εἰς τὸ τῶν Θεσμοφόρων τέμενος ὁ διδοὺς τὴν πίστιν ἱερῶν τιμῶν γενομένων περιβάλλεται τῇ ἐκ πορφύρεως τῆς θεᾶς, καὶ λαβὼν δᾶδα καιομένην ἀπόμυνσι.

We may compare with this the robing in Achilles Tatius viii. 13 of a girl who is to undergo an ordeal of virginity: ἐστόλιστο δ' ἡ Λευκίππη τῇ ἱερᾷ στολῇ ποδῆρης χιτῶν, ὁθόνης ὁ χιτῶν (of course white linen), ζώνη κατὰ μέσον τὸν χιτῶνα, ταινία περὶ τὴν κεφαλὴν φοινικοβαφής, ἀσάνδαλος ὁ ποῦς. And this again can hardly be distinguished from the raiment worn by those who consulted the oracle of Trophonius: Maximus Tyrius xiv. 2 ὁ δειόμενος συγγενέσθαι τῷ δαιμονίῳ ἐνσκευασάμενος ὁθόνη ποδῆρει (λευκῇ ἐσθῇτι ἐσταλμένοι says Philostratus *Apoll.* viii. 19) καὶ φοινικίδι εἰσδύνει ὑπτίως κατὰ στομίου στενοῦ. A crimson ταινία was in some cases—probably in

² He supposes this to have been an established piece of ritual, § 89: 'In all probability there were also carved wooden images of the Erinyes here. For these images the purple

robes were designed, which were consecrated to them upon the institution of their cultus by Athena.'

many—part of the dress worn by priests; the priests of Eleusis are one case, and another may be seen in Diels, *Sibyllinische Blätter*, p. 121. We are told by the Scholiast on Apoll. Rhod. i. 917 about those initiated in the Samothracian Mysteries that *περὶ τὴν καίλιαν οἱ μεμνημένοι ταινίας ἄπτουσι πορφύρας*: a passage used by Lobeck *Aglaophamus* 371: 'Ἱεροστολικά et Καταζωστικόν, quae Suidas recenset, ad unum eundemque locum de vestitu sacro sive initiatorum sive simulacrorum divinorum pertinere videntur, in quo quantum studii posuerint veteres, indicio sunt Stolistae sen Hierostolistae, qui a Plutarcho vocantur Ἱεροστολοὶ de Is. c. III. 104, unde nomen Ἱεροστολικά derivari commode potest. Καταζωστικόν fortasse a cinguli sacri traditione nomen habet, quo recens initiati tum in Samothraciis mysteriis tum in aliis ornari solebant. To this part of the Ὀρφικά belonged the passage quoted by Macrobi. *Sat.* 1. 18. 22: Item Orpheus Liberum atque Solem unum esse deum eundemque demonstrans de ornatu vestituque eius in sacris Liberalibus ita scribit:

ταῦτά τε πάντα τελεῖν ἱερῇ σκευῇ πυκῶσαντα.
σῶμα θεοῦ, μίμημα περικλυτοῦ Ἡλείου.
πρῶτα μὲν οὖν φλογέαις ἐναλίγκιον ἀκτίνεσσιν
πέπλον φοινίκεον πυρὶ εἰκελὸν ἀμφιβαλέσθαι κτλ.

At the Aulania Mysteries however white seems to have been the only wear: *πορφύρα* is mentioned only to be expressly forbidden in the case of the cushions on the seats of the *ἱεραί*. (Michel, *Recueil d'Inscr.* 694, II 15 ff.)

These passages I leave to consideration, remarking just two points: (1) Müller assumes that a *πορφύρε* is identical with a *φοινίκης*: and the other critics who have touched the subject do not seem ever to have suggested that there is any distinction to be drawn between them. They may be right; but it appears to me a little hazardous to assume that the colours were entirely interchangeable for religious purposes: I should be inclined to regard *φοινίκου* as the angrier colour of the two, and more appropriate therefore to Infernal Deities; its use in lustral and magic ceremonies is well known. (2) A *πορφύρε* certainly must not be regarded as peculiar to Chthonic powers: for example Strabo 648 tell us that the Magnesian city honoured Anaxenor the *κιθαριδόν*, *πορφύραν ἐνδύσασα ἱερωμένον τοῦ Σωσιπόλεως Διός*.

Diels, *Sibyllinische Blätter* (1890) p. 70, holds that the original reason for the use of red dye in lustral ceremonies was that it was blood-colour, and served as a substitute for blood: Die Farbe des Blutes erklärt die lustrale Verwendung der roten oder purpurnen Farbe (*φοῖνός*, *φοῖνιξ* vgl. *φόνος*). Daher das *flammeum* der nupta (Schol. Juvenal. VI 225 *est enim sanguineum*) und der Flaminica Dialis (die auch ein purpurnes Kleid trug), sowie überhaupt der *purpureus amictus* beim römischen Opfer, wodurch die zu Entzühnenden als Substitute des blutigen Opfers bezeichnet werden. Vgl. Verg. *Aen.* III 405 u. A. Plin. Nat. h. IX 127 (*purpurea*) *dis advocatur pluvialis*. Für

¹ See e.g. K. F. Hermann *Altcrthümer* (1858) II. pp. 139, 219, Lobeck *Aglaophamus* p. 702.

griechischen Branch vgl. Aesch. Eum. 1020; [Lys.] 6, 51; Plat. Arist. 21. Endlich geht aus der lustrale Bedeutung der purpurnen Welle und Wellfäden die apotropäische Verwendung hervor. . . . And on p. 72 fin. he quotes Varro's view as given by Servius III 67 . . . *quoniam sumptuosum erat et crudele victimas vel homines interficere, sanguinei coloris coepta est vestis mortuis iniici.*

In the *J.H.S.* 1898 p. xlv, suggesting the same origin of the colour's use, Mr. A. B. Cook ventures upon a narrower generalisation: "The cloaks of crimson dye" worn during the solemn procession which is to escort the Furies, are to be explained by the prophylactic significance of the colour red. . . . Red or purple is in every case a prophylactic colour.' I should hesitate myself to say that πορφύρα were never given to the Upper Gods as being royal colour: and in the case of our φοινικόβαπτα here I think we need not look for any secondary prophylactic reason. Blood-red alone would be enough to make the colour suitable to angry Powers. It is as a garment dyed in blood that it is worn by ὀλοή Κήρ, the Spirit of Destruction, in the midst of battle. Hom. Σ 538: εἶμα δ' ἔχ' ἀμφ' ὁμοιοσι δαφνοειδὲς αἵματι φωτῶν. The Erinyes are Κήρες 'Harms' (Aesch. Theb. 1055). It is worn by Tisiphone, the Blood-avenger, in Verg. *A.* vi. 555 *Tisiphone palla succincta cruenta*, and in Ov. *Met.* iv. 481 *Tisiphone madefactam sanguine sumit importuna facem fluidoque cruore rubentem induitur pallam*.

And what is this but military red?—a use which tradition has continued, together with drums and trumpets, to the present day; partly no doubt by reason of the splendour of it, but originally worn, one may suppose, not as a prophylactic, but as threatening revenge and blood to others. In Homer K 133 Nestor, arming for battle, dons a χλαῖναν φοινικόεσσαν. It was the regular uniform of the Laconian soldiers. Being a χλαμὸς πολεμικῇ (Schol. Ar. *Par.* 303), it was worn by the young Knights, ἐφηβοὶ ἱππεῖς, as at the Thessalian festival described by Heliodorus iii. 3, in which at the same time the girls κατηφοροῦσιν. The Salii performed their war-lance φοινικοῦς ἐνδεδυμένοι χιτῶνίσκους (Plat. *Nom.* 13). Thus there is no apparent reason to suppose a prophylactic use in the Plataean ceremony described by Plut. *Aristid.* 21, when the Archon puts on a crimson garment to sacrifice to Zeus and Ἑρμῆς χθόνιος and the fallen warriors, though never else does he wear anything but white: it might be no more than symbolical of war and bloodshed. 'The red habit,' says Burton on the *1001 Nights* vol. v. p. 156 ed. 1894, 'is a sign of wrath and vengeance, and the Persian Kings, like Fath Ali Shah, used to wear it when about to order some horrid punishment. White robes denoted peace and mercy as well as joy.' That surely was the meaning of the red flag which was waved by the priests and priestesses at Athens when pronouncing a solemn execration: Lysias ^b *contra Andoc.* p. 107. 52: ἐπὶ ταῦτοις ἱέρειαι καὶ ἱερεῖς ^c στάντες κατηράσαντο πρὸς ἐσπέραν, καὶ φοινικίδας

^b K. F. Hermann *Alterthümer* (1858) ii. p. 219 § 35 note 16 associates this as chthonic ritual with our passage.

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^c Plut. *Alost.* 22 καταρᾶσθαι προσηφρίσαντο πάντας ἱερεῖς καὶ ἱερεῖας, Max. Tyr. xii. 6 ἐκπαράσαντο ἀντὶ Κήρυκος καὶ Σιδηλλίδας.

ἀνέσεισαν κατὰ τὸ νόμιμον τὸ παλαιὸν καὶ ἀρχαῖον. It was like the black cap which our judges still put on before pronouncing sentence of death.

The garb of the Erinyes was certainly not at all times μέλαν or φαιόν unrelieved: in Lucan vi. 634, when Erichtho is preparing for the exercise of her Black Art, *discolor et vario furialis cultus amictus induitur*. We are told by Diog. Laert. vi. 102 that Menedemus the Cynic assumed the guise of an Erinyes: 'Ερινύος ἀναλαβὼν σχῆμα περιέει: ἦν δὲ αὐτῷ ἡ ἐσθῆς αὐτῇ χιτῶν φαιὸς ποδῆρης, περὶ αὐτῷ ζώνη φοινικὴ κτέ. This seems to imply that the crimson girdle, like the sad-coloured robe, belonged to an Erinyes.

The costume of one upon a vase figured by Millin *Peintures* II 68 is thus described by Boettiger *Die Pericamasse* (of which I possess only the French translation): 'L'habit retroussé ne descend que jusqu' aux genoux; elle est chaussée de cothurnes. Elle est ailée, et ses ailes sont attachées aux épaules avec un ruban de pourpre. . . . Tout son vêtement . . . est garni de belles broderies en forme de méandres, et orné de bandes de pourpre, et de paillettes d'or en forme de cercle.' Boettiger gives reason to suppose that this costume, with the cothurns and purple ribbands, was designed to represent the Erinyes as huntresses; it is just the costume that Artemis or Diana, as the Huntress, is arrayed in (cf. Xenophon Ephes. i. 2):—though, as I learn from Mr. G. F. Hill, 'it is impossible to argue much from the colour of the ribbands here, because on vases of this kind the only colours used are black, white, purple, and the natural colour of the ware.'

Apart from this, however, the other evidence gives us, I think, sufficient reason to conclude that the Eumenides might wear this colour without ritual offence. And on this occasion, which is not, as usual, δῦσφημον, but εὐφημοι—white surplices indeed they cannot wear, but φοινικᾶ, which in some degree at least are proper to them, may be used to robe them in for special honour, just as ἀλουργῇ πορφύρᾳ were used on festal days to robe the statues of the Gods above.

But to the Athenian spectators of the play I think that this investiture would have conveyed another and more definite significance. All the latter part of the play is devoted to two inter-woven subjects—to the glory of Athena, who is shown abolishing the ancient *Ordeal* by Oath⁷ and instituting civilised Justice and Trial by Jury on the Areopagus; and to the establishment of the Eumenides in their abode at Athens, where instead of being regarded with disgust and hatred, they are henceforth to be looked on as beneficent and salutary. The last quarter of the play is occupied with this arrangement. At v. 807 Athena offers them a habitation in the righteous land; at last prevails upon them to accept it; and the acceptance is celebrated with songs of mutual congratulation. They are now to be ξυνοικήτορες (837) among her citizens, χώρας μετασχεῖν τῆσδε (871), τῆσδε γαμβροὶ χθονός (891); they become μέτοικοι (1012), accepting their ξυνοικίαν (917), μεταίκιαν (1019). It would be strange, under all the reiteration of the

⁷ This is the significance of vv. 432-436.

words *μέτοικοι*, *άστοί*, and *πολίται*, if the thoughts of the Athenian hearers had not turned to the relations between Burgesses and human Denizens.

The greatest festival in the Athenian year, the National Feast, was the *Παναθήναια*, to the glory of Athena. And a most notable feature of that great occasion was that the *μέτοικοι* took part in the procession. To the mind of Aeschylus the likeness of the situation could not help occurring; and it would be like his way to use the parallel and keep suggesting it by elaborate allusion. Thus as I have pointed out elsewhere, in the *Choephore* one of the main ideas is the change from Darkness into Light; and again the usurpers in the palace are conceived as a pollution or disease to be expelled by purges: with those two conceptions, Aeschylus could not but have present to him the analogy of the Great Mysteries, in which those initiated and made perfect after purifying ceremonies passed from profound darkness suddenly into a great light; and I think that in the language of the last chorus at any rate there are unmistakeable allusions to them.

If, then, we could only find that at the Panathenaea the *μέτοικοι* were endued with any corresponding honour, we might fairly think that Aeschylus intended to suggest it. Crimson cloaks indeed we could hardly expect that resident aliens should be allowed to wear; but we might be content with something short of that. Yet crimson cloaks and nothing less, were actually worn by the resident aliens in that procession: Photius *Σκάφος*: ἔφερον οἱ μέτοικοι ἐν τῇ πομπῇ τῶν Παναθηναίων οἱ μὲν χαλκᾶς οἱ δὲ ἀργυρᾶς, κηρίων καὶ ποτίμων πλήρεις, ἐν δὲ δυνότες φοινικίους χιτῶνας. οὕτως Μένανδρος.⁵ Bekker Anecd. 214. 3 (Suid., Et. Mag.) ἄσκοφορεῖν: τὸ ἐν ταῖς Διονυσιακαῖς πομπαῖς τοὺς ἀστούς, ἐσθῆτα ἔχοντας ἢν βούλονται, ἄσκους κατὰ τῶν ὁμῶν φέρειν. καὶ οἱ τοῦτο ποιοῦντες ἄσκοφοροι καλοῦνται. ὥσπερ τόμος τοὺς μετοίκους χιτῶνας ἐνδεδύσθαι χρῶμα ἔχοντας φοινικοῦν καὶ τὰς σκάφας φέρειν· ὁθεν καὶ σκαφηφόροι καλοῦνται.

And we have a valuable record of the spirit in which this was done: Hesychius *Σκαφηφόροι*: οἱ μέτοικοι οὕτως ἐκαλοῦντο· σκάφας γὰρ ἔφερον ἐν τοῖς Παναθηναίοις, ἵνα ὡς εὐνοίᾳ ἀριθμῶνται, μετέχοντες τῶν θυσίων: 'in order that, partaking in the sacrifices, they may be included as being of good will.' Now let us recall the phrases used by Aeschylus:

φοινικοβάπτεις ἐνδυτοῖς ἐσθήμασι
τιμᾶτε, καὶ τὸ φέγγος ὀρμίσθω πάρος,
ὅπως ἂν εὐφρῶν ἢδ' ὁμίλια χθονὸς
τὸ λοιπὸν εὐάνδροισι συμφοραῖς πρέπη.
Deck them with robes of honour crimson-dyed,
And let the torch-light move, that so the land
May find this company's good will henceforth
Marked in her manhood's excellence and worth.

Good will is the relation, friendliness and sympathy—not love. *μέτοικοι* usually were regarded with disfavour, at the most with tolerance. But on

⁵ This probably refers to the proverb *εὐνομώτερον εὐφροῦς*, Menand. *Εὐεχόμεν.*

this occasion all the inhabitants of Athens were united in a common sentiment—peace and good will to all men that abode beneath the shadow of Athena's wings. Not φίλος, therefore, is the adjective, but εὐφρων; *c.* 993 τάσδε γὰρ εὐφρονας εὐφρονες αἰεὶ μέγα τιμῶντες, 1035 ὑπ' εὐφρονι πομπῇ, 1013 εἰη δ' ἀγαθῶν ἀγαθὴ διάνοια πολίταις—mutual goodwill.

The phrase εὐάνδροισι συμφοραῖς has caused some stumbling: Paley renders it 'may henceforth be noted for (causing) circumstances favourable to the life of men,' and Liddell and Scott in the same way, 'prosperous to men'; Mr. Sidgwick, "'may shine forth with prosperous blessings," rather emphatic and unusual phraseology.' Wecklein understands it better, 'durch das Glück, dass das Land wackere Manner besitzt,' comparing καλλίπαις πότμος in *Agam.* 759. It means strictly 'by results consisting in εὐανδρία or εὐανορία,' 'by εὐανορίαῖς resulting' or 'befalling,' exhibitions of fine manhood: Pindar *Pyth.* i. 40 ἐβελήσαις τιθέμεν εὐανδρου χάραν, *Ol.* v. 20 αἰτήσων πόλιν εὐανορίαῖσι τάνδε κλυταῖς δαιδάλλειν. It was the pride of Athens: in *Xen. Mem.* iii. 3. 12 Socrates says οὐδ' εὐανδρία ἐν ἄλλῃ πόλει ὁμοία τῇ ἐνθάδε συνάγεται. The phrase, therefore, is apt and intelligible enough without any further allusion. But with the Panathenaea once suggested to him, what Athenian citizen could have failed to think of one! Among the special ceremonies belonging to that feast, none was more familiar than the εὐανδρία,⁹ which I may describe in Mr. Purser's words (*Smith Dict. Ant. Art. Panathenaea*):

'The smaller Contests.—(α) That called *Euaudria* (εὐανδρία) was a means by which the leaders of the procession were chosen. It was a λειτουργία, [*Andoc.*] in *Aleib.* § 42, and he who performed it chose out of his tribe a certain number—perhaps about twenty-four, the number of a chorus—of the tallest and best-looking members, and arrayed these with proper festal garments.'

Then follows the procession with its flaming torches and its paean in dactylic metre and its ὀλολύγματα, reminding us of the Panathenaeic παννυχίε with its torch-race, and its paeus (*Heliodor.* i. 10), and its ὀλολύγματα of women (*Heraclid.* 777):

βᾶθ' ὁδόν, ὧ μεγάλαι φιλότιμοι¹⁰

1033

Νυκτὸς παῖδες, ὑπ' εὐφρονι πομπῇ—

εὐφραμεῖτε δέ, χωρῖται.

March onward and come where good will shall estate you,

Dread Children of Night, in the pride of your dower—

Let all the people refrain their voice!

⁹ *Michaelis Parthenon* p. 326 (where the *doxai* for the Panathenaea are quoted in full), *Hermann Alterthümer* (1858) ii. p. 358-67, August Mommsen *Feste der Stadt Athen* pp. 66, 101-4.

¹⁰ βᾶθ' ἐν δόμῳ μεγάλῃ φιλότιμοι MS. Wellesley's reading, generally adopted, βᾶτε δόμῳ, is not Greek. Arschylus—if he had tolerated such an ugly jumping rhythm—would have said βᾶτε δόμῳ or δόμους. I believe that

ΒΑΤΕΝΔΟΜΩ was a mistake for ΒΑ-ΤΕΟΔΟΝΩ and that Arschylus is using the same formula that Sophocles uses in setting forward a procession to Athens *Ἐργάνη* (at the *Χαλκεία*, also called *Ἀθήναια*, Mommsen *Feste* p. 343) *frag.* 760: βᾶθ' αἰεὶ δᾶς δὴ πᾶσι δ' χειρῶναι λέως.

Where in Earth's immemorial dark caverns swait you
 Drink-offerings and burnt, adoration and power.
 Let all the people refrain their voice!

Now in his *Heortologie* (1864) p. 171 August Mommsen had already seen reason to infer that these concluding ceremonies were designed with reference to the Panathenaic *παννυχίς*. He says on p. 171: 'Wie dem Tage auf der Burg zu bringenden Opfer und dem Festzuge nächtliche Religionsgebräuche vorangingen, so durften auch dergleichen auf dem Areopag stattgefunden haben; denn auch hier fand ein Opfer (Rangabe 814) am Lichttage der Panathenäen engsten Sinnes statt, wie denn von einem Festzuge für die Semnen die Rede ist, an dem kein Slave theilnimmt; Philo de praest. libert. p. 886 B; G. A. 62, 37.'

With this note:

'Vielleicht bezieht sich der Schluss von Aeschylus Eumeniden zum Theil auf Cultushandlungen der panathenaischen Pannychis. Die racherischen Gottheiten ergreifen Besitz von den Tiefen der attischen Erde unter dem Glanze von Fackeln, geleitet von dem *εὐκλής λόχος παίδων, γυναικῶν καὶ στόλος πρεσβυτιδῶν*. Der wiederholte Ruf des Eumeniden-Geleits *ὀλολύξατε νῦν ἐπὶ μολπαῖς* erinnert an die (panathenaischen) *ὀλολύγματα* und *μολπαί* aus Euripides. Orestes der Muttermörder muss an einer *φθινὰς ἡμέρα*, vielleicht gerade an der *τρίτῃ φθινοῦτος*, vor den Schranken gestanden haben.—Das eigentlich religiöse Hochfest der Panathenäen wird von der Hieropoön verwaltet; unter Hieropoön giebt es auch für die Semnen; in Demosthenes' Zeit freilich drei besondere für die Semnen (21, 115), während man erwarten möchte, dass die Hieropoön, welche eine zahlreiche Behörde waren, den Dienst der Athena und der Eumeniden zugleich besorgten. Im Festjahr der Athener ist nicht leicht eine passendere Stelle zu finden als die Panathenäen, um den Semnen-Cultus einzuweisen.—Derselbe wird damit nicht mit der Athena-Religion in dem Maasse vereinerleitet, dass er nicht an ein besonderes Geschlecht geknüpft bliebe, welches mit der Religion der Athena nichts gemein hatte. Dies besondere Geschlecht war das der Hesychiden, Polemon fragm. ed. Preller p. 91.'

In the later work, the *Fests* of 1898, this note is not repeated; after saying on p. 106: 'Die Juchzer der Mädchen—*ὀλολύγματα* bei Euripides [*Herul.* 777]—beruhten wohl auf sehr alter Sitte. Es mögen Worte des Herbeirufs oder des Willkommens gewesen sein, kurze Litaneien, die von der Priesterin vorgesprochen wurden, dass die Mädchen sie nachkreischten,' he adds in the note merely: 'Wohl unter Instrumentalbegleitung; Aeschyl. Eumenid. a. E. *ὀλολύξατε νῦν ἐπὶ μολπαῖς*.'

I was not aware of Mommsen's view when Photius' remark about the crimson cloaks of the *μέτοικοι* set me on the track of the Panathenaea, and I was made acquainted with it by a mention in Mr. Purser's article. Here then are two opinions, starting from quite different points, and converging independently towards the same conclusion. What I think is that the whole of this procession was designed by Aeschylus as a reflection of the great

Panathenaic, which was held in honour of Athena, and in which both burgesses and denizens took part in amity; and that the treatment of the Eumenides is borrowed from the symbolic treatment of the *μετοίκους* at that feast. It was his way, when he had conceived a parallel, to work it out elaborately; and with this clue to start from there are other points where we may find a purposed correspondence. Thus it is possible to see a double application in c. 991:

ἐκ τῶν φοβερῶν τῶνδε προσέρπον¹¹
 μέγα κέρδος ὁρῶ τοῖσδε πολίταις·
 τάσδε γὰρ εὐφρονας εὐφρονες αἰεὶ
 μέγα τιμῶντες καὶ γῆν καὶ πόλιν
 ὀρθοδίκαιον
 πρέψετε πάντως διάγοντες.

How apt their wisdom is to learn
 Good language: In these Shapes of fear
 Much gain and vantage I discern
 In store for all my Burghers here:—
 Yield them great honour, keep good will
 Between you, and your land shall be
 A star among the nations still
 For just and righteous polity.

Athens, from the time of Solon, cultivated and encouraged the *μετοίκους*, a policy, as Grote shows (*History of Greece*, Part II c. xi), of capital advantage to her 'since it determined not merely the extension of her trade, but also the pre-eminence of her naval force.' Later Greek writers plainly recognise the value of them as a source of wealth: Xen. *de rehl.* 4. 40 ὅσα δ' ἂν ἐφευρίσκη (ἡ πόλις) διὰ τὸ εἰρήνην εἶναι καὶ διὰ τὸ θεραπεύεσθαι μετοίκους καὶ ἐμπόρους. . . 'If we make peace,' says Isocrat. *de pace* p. 163 c. ὀφόμεθα τὴν πόλιν διπλασίας μὲν ἢ νῦν τὰς προσόδους λαμβάνουσιν, μεστὴν δὲ γιγνομένην ἐμπόρων καὶ ξένων καὶ μετοίκων. Lysias in *Andoc.* p. 107, 31: μετοίκοι μὲν καὶ ξένοι ἐνέκα τῆς μετοικίας ὠφέλουν τὴν πόλιν εἰσάγοντες. It was a wise imperial statesmanship that Lysistrata, the Peace-maker, displayed in *Ar. Lys.* 579: ἐχρῆν . . . ξαίνειν ἐς καλαθίσκον κοινὴν εὐνοίαν, ἀπαιτας καταμιγνύοντας τοὺς τε μετοίκους καὶ τις ξένος ἢ φίλος ἡμῖν . . . καὶ νῆ Δία τὰς γε πόλεις, ὅποσαι τῆς γῆς τῆσδ' εἰσὶν ἀποικοί.

¹¹ My suspicion of the MS. *προσέρπον* comes short of being certainty, but I am sure that my *προσέρπον* deserves more consideration than it has received. Latin, I know, often speaks of the *Pariterum ora*, but Greek here I feel should say, not *from these dreadful visions*, but *from these dreadful-visioned Ones*, ἐκ τῶν φοβερῶν τῶνδε or the like—*φοβερῶν* is an epithet of theirs in *Orph. hymn.* 69, *δευῶτες* O. C. 34, τὰς αἰματοπαῖς καὶ δρακοντάδεις κόρας Eur. *Or.* 254, ἐκ τῶν φοβερῶν τῶνδε therefore should be *from*

these dreadful creatures (φοβεραὶ κόραι they are called in *Orph.* 4. 66), τῶνδε meaning the Erinyes themselves, as in 993, 973, 951, 936. If that is so, *προσέρπον* is exactly the word wanted, like καὶ σοὶ προσέρπον ταῖς ὁρῶ in *Aj.* 1255: ἔγωγε, προσέρπον, ἐφίμην were used especially of time coming on, or what time has in store. A participle is not indeed necessary with κέρδος ὁρῶ, but Heyne had already decided on, suggesting that after ὁρῶ we should read *προσπαυρήσον*.

'ay, and all the colonies as well, draw all these scattered strands together into one great ball, and so τῷ δήμῳ χαλῖναν ὑφῆναι.¹²

Applied to the human μετοίκους, then, Athena's words would mean, *If you encourage μετοίκους, and foster relations of mutual good will, you will not only find in them a source of material profit, but they will make your name renowned throughout the world for justice and protection of the foreigner*—that δίκᾱ ξεναρχής for which Pindar so often praises Aegina, and which Aeschylus had lauded in the *Suppliants* (709). χαίρετε χαίρετ' ἐν αἰσιμαῖσι πλούτου is the reply of the Eumenides, *Be ye glad in righteousness of wealth*, not gotten by oppression and extortion; those are terms in which the μέτοικοι, recognising their just treatment, might well have returned thanks. Athena then repeats her counsel:

τὸ μὲν ἀτηρόν
χωρίς κατέχειν, τὸ δὲ κερδαλέον
πέμπειν πόλεως ἐπὶ νίκη.
ὕμεις δ' ἡγεῖσθε, πολιτσοῦχοι
παῖδες Κραναοῦ, ταῖσδε μετοίκους
εἶη δ' ἀγαθὸν
ἀγαθὴ δαίνοια πολίταις.

Keep all harm in durance penned,
And all gainful blessing send,
To give her victory.
Come then, Cranaus' ancient seed,
My Citizens, my Burghers, lead
And bring these Dwellers on their way,
Still keeping in your hearts, I pray,
Good will and charity!

There is so much insistence on the word τιμᾱς, the rights and honours to be granted them in Athens (827, 858, 870, 885, 895, 1033), that if this double application was intended, it would seem that the μέτοικοι at this time in Athens were a class enjoying civil rights,—not those, of course, belonging to full citizens, but more than those of wholly-unfranchised ξένοι.

Our interest in the Panathenaea hitherto has been owing mainly to another work of art, the sculptures of Pheidias on the Parthenon. Henceforward, when we read this last scene of the *Eumenides*, we may find, I think, a new occasion to recall that splendid pageant.

WALTER HEADLAM.

¹² All these references I owe to Mr. A. H. Cooke's article *Μετοικοί* in *Smith's Dict. Ant.*

A NEW REPLICA OF THE CHOISEUL-GOUFFIER TYPE.

THE central photograph shown on p. 279 is of a fragment now in the courtyard of the Terme Museum in Rome, but unpublished as yet in the catalogue. The material is a white coarse-grained marble probably of Greek origin, and the fragment represents the right leg (*Standbein*) of a standing male figure, and the trunk of a tree which supports it. Against the trunk, and at the side of the leg, is a quiver with conical lid, slung by a strap over a projecting branch. The foot is missing from the centre of the ankle-bone, and the upper line of breakage runs from the hip-bone inwards and downwards to the junction of the legs. From this point to the ankle the fragment measures 67½ centimetres, so that it is approximately life-size. There is a *puntello* in the middle of the thigh on the outside.

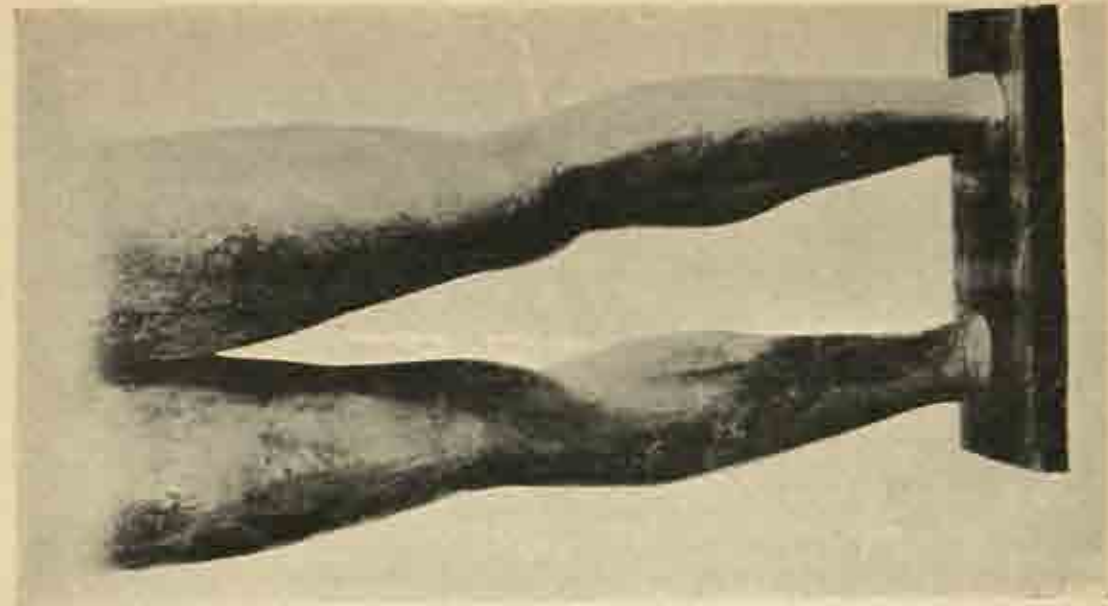
The workmanship is excellent, and belongs in style unmistakably to the middle 5th century. Fortunately we have no difficulty in restoring the whole statue, as the comparison with the legs of the Choiseul-Gouffier Apollo and the 'Apollo on the Omphalos,' which are here shown side by side with the Terme leg, leaves no reasonable doubt that our fragment belongs to another, and a very fine, replica of that well-known type. Compare the prominent muscular swelling just above the knee-cap and the course of the same muscle along the inner line of the thigh, the hard sinewy treatment of the leg and the stiff rounded thigh, the profile of the knee and the broad groove which separates calf and shin bone, and the identity of original becomes evident at once.

I give here the measurements at the points indicated beside the photograph of the Terme fragment, and at the corresponding points in the two other statues.

LEG IN TERME MUSEUM IN ROME.	LEG OF CHOISEUL-GOUFFIER APOLLO IN BRITISH MUSEUM.	LEG OF 'APOLLO ON THE OMPHALOS' IN CENTRAL MUSEUM, ATHENS.
A—d 365 m.	38 m.	36 m.
B 25 m. (intercondylar)	25 m.	24 m.
C—C 67½ m.	665 m.	67 m.

A head¹ of the same type is also in the Terme Museum, but the material is a finer closer-grained marble, and therefore it has probably no connexion with the leg.

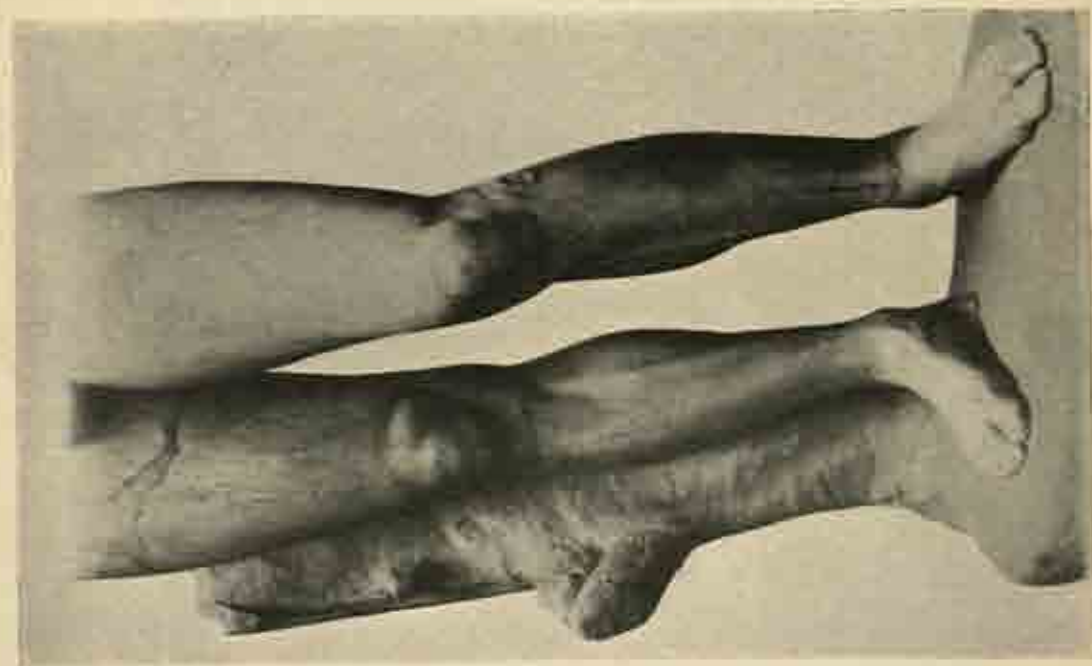
¹ Merlati and Vaglieri, *Guida*, p. 37, No. 498. The head was removed from the Magazine of Sta Francesco Romana.



LIPOD OF APOLLO ON THE OMPHALOS



LIPOD OF TRUTH, METEOR.



LIPOD OF CHOISSEUR-GOUTIER APOLLO

This fragment is important for two reasons. With the possible exception of the Athenian replica it is by far the finest in workmanship of the many examples of this type—the delicacy of the surface and the smooth modulation of the muscles is apparent even in the photograph—and, what is of especial interest, it gives us an attribute, in the quiver, which provides valuable evidence for the meaning of the statue, a point on which controversy still exists.² In other replicas we have either the tree-trunk (Choiseul-Gouffier) or the quiver (Torlonia); here we find the two conjoined, and thus the view that the quiver was a merely fortuitous and unmeaning support is disposed of. In a position where it is not needed for support it can only have a significant meaning. It is hard to see that this meaning can have been other than to show that Apollo was here to be recognized. There are now therefore four replicas of the type with Apolline attributes, for, in addition to the quivers of the Terme fragment and the Torlonia statue, the Ventur head in the British Museum possesses the long locks of the deity, and the Cyrene head, also in the London collection, was found in a temple of Apollo.

As regards the connexion of a quiver attribute with Apollo it is necessary to remember that the support of the Delian *Diadromenos* in the Central Museum at Athens has also a small quiver slung over a branch. Miss McDowall in the *J.H.S.* for 1904, p. 204, argued that this proved that there was no necessary connexion between a quiver support and Apollo. Hauser on the other hand in the *Jahreshefte* for 1905 (vol. viii. p. 42) maintained that it proved that the statue of the *Diadromenos* represented an Apollo. Lowy in the following number of the same journal (vol. viii. p. 269) denied the necessity of this connexion, but explained the presence of the quiver as a natural object for representation in a Delian workshop. It is also of course possible to contend that the use of a quiver in this statue implies an adaptation of the athletic portrait to a divine type. Until the subject of copies and their attributes is more fully treated we cannot hope to have full light on such questions, but where we have no proof to the contrary, it will be very hazardous to reject the evidence of the quiver in this Terme fragment and its replicas as a deliberate device of the copyist for recognition of the deity.

In conclusion I wish to thank Mr. Wace of the British School at Rome, who was kind enough to take the photograph of the leg here published, and Dr. Rizzo, director of the Terme Museum, without whose ready co-operation the photograph could not have been taken at all.

GUY DICKINS.

² Dr. Waddstein's view that the statue is an athletic portrait (*J.H.S.* vol. i. p. 168) has been answered by Furtwängler (Roscher's *Lexicon*, i. p. 455), A. H. Smith (*B.M. Cat.* of

Sculpture, vol. i. p. 85, No. 269), Schreiber (*Arch. Mus.* ix. p. 248), and others, who maintain that it is a statue of Apollo.

TWO BRONZE PORTRAITS FROM EGYPT.

[PLATE XVIII.]

THE bronze statuettes which are reproduced on PL XVIII. form part of the small collection of Greek and Roman antiquities in the Egyptian department of the British Museum.¹ They are practically entire, though the surface of the bronze has suffered considerably from oxydization. I am much indebted to the authorities of the Museum for allowing me to publish two such interesting pieces.

The provenance of the two bronzes is indicated by their place in the Museum: they come from Egypt. It is evident too that they have been made as a pair. At first sight they might be taken for Olympian deities, but looking more closely one sees that the heads are intended for portraits. They must therefore represent a deified king and queen, and there can be little doubt as to what royal couple they do represent. The male figure is Ptolemy Philadelphus and the lady is his elder sister and second wife, Arsinoë II.

The king stands in an easy attitude, his right hand resting on a long sceptre or spear. In his left arm he holds the club of Herakles. He wears cothurns, and his head is covered by a cap consisting of the skin of an elephant's head. The features, the short whiskers and the hair round the forehead are exactly the same as on the coins (cf. especially *B.M. Cat.*, PL VII, No. 5). The elephant-cap is a significant attribute. It is the characteristic headdress of Alexander the Great on the early coins of the Ptolemaic series, and in later times it became the distinctive mark of the city-goddess of Alexandria. For the ruler of the new state of which Alexander was the founder it was therefore an appropriate symbol. And if the elephant-cap means that Ptolemy claims to be the rightful successor of Alexander, the club which he carries in his left arm reminds us that he counted descent from Herakles.² In the eulogy of Theocritus, xvii, 13-33, it is with the same pair of heroes, Alexander and Herakles, that his father Soter is

¹ Nos. 38442, 38443. Mr. H. B. Hall kindly supplies the following details: Height of Ptolemy, 1 ft. 3½ in.; of Arsinoë 1 ft. 2 in. They are apparently hollow cast, but it is not possible to say whether each figure was made in one

piece or several. The pupils of the eyes are incised. The object hanging from Ptolemy's arm might be either a lion's skin or a cloak.

² See the beginning of the Adonis inscription (c.g. Mahaffy, *Hist. of Eg.* p. 195).

associated. It is also possible that the cothurns are intended as a mark of affiliation to Dionysos, a very popular deity in Alexandria and one with whom the Ptolemaic family claimed some relationship.

The face of the queen is too much damaged to be used for comparison with the coin-portraits. Her hair is arranged in the usual fashion (though this is not quite apparent in the photograph), and is surmounted by a low stephane. She wears shoes. The drapery, which consists of a sleeveless chiton and a rather tightly drawn mantle, showing the contours of the body, should be contrasted with that of the more matronly figure on the finience vases.² The sceptre which she held in her right hand was in all probability not the papyrus-sceptre of Egyptian queens, but one of the same type as those which appear on Ptolemaic coins. There is indeed nothing Egyptian in either of the two statuettes. The double cornucopias which rests in the queen's left arm is a well-known emblem on her coins (*R.M. Cat. Pl. VIII*). Athenaeus tells us that it was first invented as an attribute of the statues of Arsinoë in allusion to her riches and generosity³; her horn of blessings, as it were, held double. The flattery is in much the same spirit as a passage of Theocritus in the poem already referred to:—

ἀλλ' οὕτως τόσα φύει ὅσα χθαμαλὰ Λίγυπτος . . .
οὐ μὲν ἀχρεῖός γε δόμῳ ἐνὶ πτόνι χρυσός . . .

Portraits of the Ptolemies are by no means common, and any addition to the list is welcome.⁴ But it is as whole-figure portraits in the round that the two bronzes are chiefly interesting. Small as they are, they give us a good idea of the character of Greek statues of the *θεοὶ ἀδελφοί*, of the mixture of realism and glorification which such works required. The stolid, human features of the king in particular make an odd contrast with his heroic pose and the symbols of divinity with which he is loaded. In this respect, as well as in mere style, the bronze in question is very different from another work of the same order, the Lysippic statuette of Alexander with the spear, a figure which is heroic all over but which belongs to an earlier stage of art when faithful portraiture was not one of the things demanded of the court-sculptor.

C. C. EDGAR.

Memoranda, July 20, 1905.

² *E.g.* Wallis, *Eg. Ceramic Art.* p. 50, Fig. 102.

³ xi. 497. The context and the monuments combine to show that it is the *Στέφανος* and not the simple *κίρας* of which he is speaking. *δοκεῖ δὲ συνεστασθῆναι ἐκ τῶ (or ἐκ τῆ) πρώτης τοῦ Φιλαδέλφου Πτολεμαίου Βασιλέως φορητὰ γενέσθαι τῶν Ἀρσινόης εἰκότων. τῇ γὰρ εὐκύνῃ χειρὶ τοιαῦτα φορεῖ θεμιτόν τε πάντων τῶν ἀρίστων κληρῶν, λαφανέντων τῶν θεμιτοτέρων ἐκ*

καὶ τοῦ τῆς Ἀμαλθείας ἐστὶς ἐλθόντερον τὸ κίρας ταῦτα μεμνημένοι αὐτοῦ Θεοκλή ἐκ τῶν πολλοῦν σφραγῶν

*ἐδόσαντο γὰρ σήμερον Στέφανον
πάντες αἱ τεχνίται
μεθ' ἧς πάλιν τὸ διακρίναι ἔστιν φίλτατον
Βασιλέα τρέφειν.*

⁴ A list, which might be considerably enlarged, is given by Mr. Wace in *J.H.S.*, 1905, p. 90.

NOTE ON THE ATALANTA OF TEGEA.

WHEN writing about the Atalanta of Tegea in the earlier part of this volume (pp. 169 *sqq.*), I stated my impression that I was not the first to have made the observations which I there recorded; but I overlooked the fact that Prof. Furtwängler's opinion, which in essential matters accords with mine, had already been published in a footnote to an article by Dr. L. Curtius in the *Jahrbuch des K. Deutsch. Inst.* xix. p. 79.¹ There is, however, the less to regret since my article has given occasion to some further notes on the subject by Prof. Furtwängler, which he has published in the *Sitzungsberichte* of the K. Bayer. Akademie. 1896. pp. 383 *sqq.* I have to thank him for a copy of these notes, which give a fuller account than before of his observations and the inferences to be drawn from them. His visit to Tegea, at which his notes were made, was in March 1904; mine was in April of the same year; and so his observations have the priority, though I had, of course, no knowledge of them either when I examined the sculptures at Tegea, or when I wrote down my results for publication; it is a matter for great satisfaction to find them confirmed by so eminent an authority. As the Bavarian *Sitzungsberichte* may not be accessible to all readers of the *Hellenic Journal*, it may interest them to hear that Prof. Furtwängler thinks the probability of the head belonging to the torso depends not only on the similarity of marble, of weathering, and of general appearance, but also on the extremely beautiful effect of their combination. He would, however, explain the difference of material from the heads already known, not as I have done, but by supposing that all the figures of the eastern pediment, except the boar, were of large-crystallised (Parian) marble, and that all the heads and other fragments in the inferior local (Dolianá) marble come from the western pediment. It is impossible to decide this and other questions without a more systematic study and publication of all the extant remains of the sculpture. Such a publication by the French excavators will be awaited with eagerness, in view of the extraordinary interest of these sculptures for the history of art. It is to be hoped that they will include a photograph of the head and the torso of Atalanta combined, if only as an experiment: the combination from the published photographs which I have given in the *Journal* is of course only to be taken as a provisional and in some ways unsatisfactory expedient.

E. A. GARDNER.

¹ The head is also referred to by Dr. Amelung in the text to Brunn-Bruckmann's *Denkmäler*, Nos. 582-584, p. 7, n. 18. More recently an

article with some more illustrations by M. Arvanitopoulos has appeared in the *Ep. Aex.* 1906, pp. 37 *sqq.*

A STATUETTE FROM NORWAY.

THE British Museum has recently acquired a small bronze statuette, which is of some interest, not for its artistic merit, but for the probable place of its discovery. The statuette, 2½ inches high, represents a woman, who is dressed in a long chiton, which folds over so as to form a sort of cape and has short sleeves, leaving the arms bare from above the elbows. She is standing with her feet close together and holds her skirt with her left hand



in the familiar 'Spes' attitude. Part of the left foot and the right arm from the elbow are broken away. Her hair falls in long tresses over her neck and shoulders, and is indicated by incised lines. Another incised line seems to represent a necklace.

The style of the figure is very rude, and it has been much injured, but it seems to show considerable likeness to the art of Ionia, and may perhaps

be the work of an Italian craftsman, working under Ionian influence. It can scarcely be later than the last quarter of the sixth century B.C.

The statuette was found in the shop of Mr. Hammer, a dealer in old silver, at Bergen in Norway. It lay neglected in a drawer among snuff-boxes and other objects of recent date, but with it were three fibulae of the leech-type, ornamented with incised chevrons and concentric circles and corresponding to Montelius, *Italie Primitive*, Pl. VIII. No. 87. Fibulae of this type might safely be assigned to about the same date as that given above to the statuette. Mr. Hammer believed, though he was unfortunately not quite certain on the point, that these four objects had been brought to him a few years ago, and that they had been then recently excavated in the neighbourhood of Bergen. Their provenance is not therefore proved, but the homogeneity of the assumed find makes it at least not impossible.

If it be assumed that statuette and fibulae were found in Norway, some interesting questions are suggested. Imports from Italy are fairly well known in Western Europe, and a considerable list can be compiled of Italian fibulae, which have been found in England.¹ But in the North such finds are rare, and even products of the Bronze Age of Central Europe do not commonly occur in Norway.

The only suggestion, which occurs to me, is that the four objects contained in the assumed find drifted up to the neighbourhood of Bergen as the result of the trade in amber.² The trade with North Italy in amber began as early as the period of the Lake Dwellings, and it was flourishing between the eighth and the fifth century B.C. At that time the amber came from the coasts of Jutland and not, as at a later date, from Pomerania, which is now the centre of the traffic. From Jutland to the south of Norway is not an incredible voyage for a sailor of the sixth century, and that may have been the course followed by the statuette and the fibulae. The suggestion is a mere conjecture. The find is an isolated find, and it is not certainly attested, but it seemed possible that the discovery in Norway of a work, however humble, of archaic Greek Art might be of some interest to northern archaeologists.

A. H. S. YEAMES.

¹ See a paper on this subject by Prof. Ridgeway and Mr. Reginald Smith in the forthcoming part of the *Proceedings of the Society of Anti-*

quaries.

² See Sophus Müller, *Nordische Altertums-kunde*, i. p. 316 ff.

FRESH EVIDENCE FOR T.

SINCE the appearance of my article *Tsade and Sampi* in the preceding issue of this journal, a discovery highly important for the history of 'Tsade' has been made in the course of excavations at Ephesus by Mr. D. G. Hogarth, to whose kindness I owe the following information.

On a silver plate found in the primitive stratum of the Artemision, below the Croesus temple, there is an inscription in which T occurs thrice, in the words *τεΤαρες* and *τεΤαρυζοντα* forming part of sentences in Ionic Greek.

The position of the objects found in relation to the Croesus temple makes 550 B.C., the beginning of the reign of Croesus, the absolute terminus of date on the lower side: there is, I understand, little doubt that the inscription belongs to the latter part of the 7th century B.C.

Apart from the great value of so old a document to epigraphy and archaeology in general, its importance for the history of T lies in the following facts:

1. It is the oldest occurrence of T as a sibilant.
2. It occurs in ordinary words of Ionic Greek (not in a place name, nor in a foreign word in Greek characters); and it is the *only* extant instance of independent authority.

(See my article p. 344 *et seq.*)

3. It is a quite reliable reading, confirming other readings hitherto not quite sure (cp. *ibid.*), viz. those of the Halicarnassian inscription Brit. Mus. No. 886 (*I.G.A.* 500), *Ἀλικαρνατ[έω]ν*, *Ῥατᾶτιος*, *Παννᾶτιος*; and those of the Teos inscription *I.G.A.* 497 B 22, 23, *θαλατῆς*—both inscriptions being of the fifth century B.C.
4. It agrees with these and the METΑ coins, *B.M.C. Mesembria*, pp. 132, 133 (4th–2nd cent. B.C.), in making T = Ionic ΣΣ; and having a phonetic value which I take to be dental-sibilant, perhaps = modern *ts* or *ch* (Ger. *z* or *tseh*). I have explained (*ibid.* pp. 346, 347) some reasons for supposing that there was a dental element as well as the sibilant in T; and the Ephesus plate gives a fresh suggestion in the peculiar doubling of Tau in each of its occurrences after κ or χ, even over the separation of two words, thus ΕΚΤΤΩΝ and ΕΚΤΤΟΔΟΡΑΤΟΣ. I

suspect a linguistic phenomenon resembling the Eursian *chi-chi*.

5. It agrees with the evidence already cited (*ibid.* pp. 347, 348) to show that the area of provenance of the sibilant T is confined to two districts associated by intercourse and colonization, both using T = ΣΣ, viz. the Ionian sea-board of Mysia and Lydia (in particular the towns Teos, Halicarnassus, Ephesus, Miletus) and the Pontic coast of Thrace (Mesambria and probably Apollonia, Istrus, Odessus). It still leaves unanswered the important question whether this T was carried to Ionia from Thrace, or whether it was brought back from Thrace to Ionia.

As regards T the episemon, I am indebted to notes kindly sent me by M. Svoronos and Freiherr Hiller von Gaertringen for some additional references.

M. Svoronos points out that in addition to the list given in my article pp. 342 *seqq.*, T occurs also on some bronze tesserae used as symbols of the theatre of Dionysos at Athens, and datable 343-338 B.C. See his *Journal Intern. d'Archéol. numismatique* (Athens), vol. i. p. 46, no. 9 α-δ with plate Γ' no. 9; p. 46, no. 30 with pl. Γ' 32; p. 52 no. 71 with pl. Δ' 32.

These are thus perhaps the oldest instances extant of the numeral T.

I do not readily agree with him in reading the Ε in pl. Γ' no. 1 also as a T placed on its side by error in arranging the plate for photography. Its shape is different, the inequality in the lengths of the three parallel bars which usually distinguishes T being absent from this Ε. Plates Δ' 4 and Γ' 17 show a character Μ which reminds one somewhat of the Rhodian character Τ (= 900), to which Freiherr Hiller von Gaertringen calls my attention as 'noch jünger als Kern *Inscr. Magn.* 100.' This is of the first century B.C. See *I.G.* xii. 1, 913 (= *I.G. Insul.* i. 1, 913) and p. 207 *addenda*.

M. Svoronos also gives an interesting reference to a note of his *J. Intern. d'Arch. num.*, p. 114, no. 1, which suggests that the true place of T in the numerical alphabet may have been between Σ and τ, as agreeing with an exceptional value of the episemon which he has found. Perhaps I do not quite understand the application, but why τὸ σπάρτιον καὶ περὶ τρυφὸν στρογγύλον Τ; I note with agreement that he thinks T, the sibilant, is equivalent either to double Sigma or to double Tau—a sidelight on the question of a dental phonetic value.

As regards the later Sampi, I find that Ulfilas in his adaptation of the Greek alphabet for the writing of the Gothic language in the fourth century A.D. took over T = 900 (in this form) along with the rest of the numeration alphabet.

F. W. G. FOAT.

SODOMA'S COLLECTION OF ANTIQUES.

WHILE the painter Sodoma was lying ill at Florence, in 1529, his pupil, Girolamo Magagni, nefariously removed from his master's studio a number of objects, a list of which is set forth in a document formerly in the Archivio Notarile at Siena, but now lost. The document, which is an acknowledgment of the return of these objects, was printed by Milanesi,¹ and is repeated by Mr. R. H. H. Cust in his exhaustive work on Sodoma.² But as it is nevertheless likely to escape the notice of the classical archaeologist, it seems worth while to extract from the list the descriptions of those objects which were certainly, or may possibly have been antiques. It is perhaps incorrect to speak of the objects as a collection; they were rather a few odd pieces picked up as useful models by a painter who owed more of the qualities of his style than is generally recognized to his appreciation of antique sculpture.

Of the objects enumerated below some of course may have been merely contemporary reproductions of antiquities; others, like the woman's foot, neither antique nor copy of antique.

- 'Uno Appolline di bronzo di gitto . . .
- Una tegola con impressioni di due animali senza gambe, di terra.
- Uno piè di femina intero, di marmo.
- Un mezzo piè di femina intero, dove sonno le dita.
- Una testuccia di vecchio senza naso, di marmo.
- Una testa di liono ch' à manco una mascella.
- Una testa col busto di donna senza naso, di marmo . . .
- Uno corpo di marmo senza braccia et gambe . . .
- Una testa di puttino di terra in profilo.
- Uno piè di marmo rialto che si posa con la punta de le dita.
- Un altro piè di marmo, qual posa tuoto.
- Due pezzi di vasi di terra cotta uno, et uno di gesso formati a l'antiquo . . .
- Uno ignudo di terra cotta senza testa antiquo con una coscia sola . . .
- Una tegola di terra antiqua drentovi uno Mercole con uno toro et una donna con polli in uno bastone . . .

The Inventory of Goods left on Sodoma's decease (Cust, p. 337, No. 31) merely mentions 'Più teste et antichaglie' in his house and '30 pezzi fra

¹ *Documenti per la Storia dell'Arte Senese*,
Tomi. III. No. 56.

² *Giovanni Antonio Bami* (London, 1906,
pp. 304-306).

teste e piei ne lo studio,' some of which may have been identical with the pieces above described. Of the former the most interesting is the last in the list. Its nature is not at first sight obvious, thanks to the naïveté of the description; but a reference to Campana, *Ant. Opere in Plastica*, Pl. LXI, shows that it is one of the well-known terracotta wall-plaques; that the 'woman with chickens on a stick' is really Winter carrying a pedum from which depend a hare and a couple of birds (in her right hand she carries a bear); and that 'Mercole con uno toro' is Hercules carrying a bull. The nature of the other objects it seems hopeless to attempt to ascertain, although 'the tile with impressions of two legless animals' may possibly have been a terracotta relief of the same class as that identified above. The nearest approximation to such a design is furnished by the reliefs with satyrs riding on panthers.³ On these the panthers have, it is true, fore-legs, but their bodies terminate in conventional floral ornaments, and the absence of hind-legs would perhaps justify the description in the list.

G. E. HILL.

³ Campana, *op. cit.* Pl. XLII. : Walters, *B.M. Terracottas*, p. 399, Nos. D 561-563.

NOTICES OF BOOKS.

The Hibeh Papyri. Part I. Edited, with Translations and Notes, by B. P. GREENFELL, and A. S. HUNT. London: Egypt Exploration Fund, 1906. Pp. xiv+410. 10 plates. 45s.

The new publication of the Græco-Roman Branch of the Egypt Exploration Fund (a double volume, issued to subscribers for 1904-5 and 1905-6) contains a selection of the texts recovered by Drs. Grenfell and Hunt from papyrus-cartonnages obtained by them in 1903 from Hibeh, a village on the east bank of the Nile, formerly in the southern part of the Heracleopolite nome. A hundred and twenty-one texts are printed in full, of which twenty-six are literary; and descriptions are given of fifty additional papyri, all documentary. All belong to the third cent. B.C., and most to the first half of it. As is natural, considering their origin, many of the papyri are fragmentary, and this is especially the case with the literary texts, which are mostly small in extent. Of the eighteen hitherto unknown texts, the longest is two broad columns of a treatise on music, which Blass assigns conjecturally to Hippias of Elis. Among the others may be mentioned an introduction, in trochaic tetrameters, to a collection of *γῶμαι*, which names Epicharmus as its author; fragments of tragedies, conjectured by Blass to be the *Tyros* of Sophocles and the *Oceus* of Euripides; and portions of the oration of Lysias against Theozotides. The fragments of extant classical authors include portions of four MSS. of the *Iliad* and one of the *Odyssey*, all containing additional verses to those of the vulgate. This phenomenon, which appears in all papyri of the third cent. B.C. hitherto discovered, is discussed at some length by the editors. The longest literary MS. contains portions of eighteen columns of the *Rhetorica ad Alexandrum*, and makes the fourth-century date of that treatise practically certain, thus supporting its attribution to Anaximenes. The non-literary texts include an astronomical calendar, compiled in the Saite nome, and a quantity of official and private documents, which contain a considerable amount of economical and administrative data. Three valuable appendices deal with (1) the Macedonian and Egyptian calendars, (2) the systems of dating by the years of the king, and (3) the eponymous priesthoods from 301 to 221 B.C. The indices are on the usual full scale; and the ten plates include representations of seventeen literary MSS., the astronomical calendar, and six dated documents, ranging from 301 to 202 B.C. The editors acknowledge considerable assistance from Prof. Blass in respect of the literary texts and Prof. Smoly in the non-literary texts and the appendices.

Essays on Four Plays of Euripides. By A. W. VERRALL, Litt.D. Cambridge University Press, 1905. Pp. xii+202. 7s. 6d. net.

The theses maintained in this volume by Dr. Verrall are: (1) that the apparent inconsistencies and incoherences of the *Andromache* are due to the fact that it is a sequel, and that the spectators knew that the action of Menelaus and Orestes was part of a pre-arranged plot to detach Hermione from Neoptolemus and force her into a marriage with Orestes; (2) that the *Helos* is a sort of mock tragedy, performed at a private theatre belonging to a wealthy widow on the island of Helos, off Attica, and embodying at once a half-serious palinode addressed to the female sex, and a parody of regular Attic tragedy.

(notably the *Iphigenia in Tauris*) : (3) that in the *Heracles* the hero is meant to be mad from his first entrance, that his supernatural birth and adventures are delusions which he himself only believes when insane, and that the appearance of Iris and Madness is a dream-vision which appears only to the sleeping leader of the Chorus : (4) that in the *Orestes*, Pylades is a wild fool, Orestes a maniac, and Electra a fiend, and that the play originally ended in the conflagration of the palace and the death of all the principal characters, the final scene of the *deus ex machina* being just tacked on superficially to satisfy the conventions of the Dionysiac drama. The *Orestes* and *Medea*, like the *Helen*, Dr. Verrall regards as having been originally written for private performance, without a chorus. The volume concludes with a number of notes on single passages in the four plays.

Die griechische Literatur des Altertums. Von U. VON WILLAMOWITZ-MOELLENDORFF. Berlin and Leipzig: Teubner, 1903. Pp. 236.

Prof. von Willamowitz-Moellendorf's sketch of Greek Literature forms a section of the combined work entitled *Die Kultur der Gegenwart*, and unfortunately cannot be obtained apart from the volume to which it belongs. Its most striking characteristic at first sight is the relatively large space devoted to the later literature. It is divided into five periods, thus apportioned in time and space : (1) Hellenic Period, B.C. 700-480 (pp. 4-35) ; (2) Attic Period, B.C. 480-320 (pp. 35-81) ; (3) Hellenistic Period, B.C. 320-30 (pp. 81-144) ; (4) Roman Period, B.C. 30-A.D. 300 (pp. 144-197) ; (5) East-Roman Period, A.D. 300-529, the date of the closing of the Platonic Academy (pp. 198-229). In the last two periods Christian as well as pagan literature is included. The history (which would well repay translation for the benefit of English students) is written from the independent standpoint characteristic of the author, and abounds in suggestive and stimulating *cléfs*. Unfortunately it has no index, a defect only partially made good by printing in the margins the names and dates of authors noticed.

Les Phéniciens et l'Odyssée. By VICTOR BÉRAUD. Vol. II. Pp. vii+630. Paris: Armand Colin, 1903.

We regret that we are so late in noticing M. Béraud's final volume. It continues the analysis of the different episodes of the *Odyssey* with chapters on the Pseudo-Cretan's tale ; the Lotus-eaters and Cyclopes ; the Isle of Aëolus and the Laestrygonians ; the Isle of Circe and the Nekia ; the Sirens, Charybdis, and Scylla ; the Island of the Sun ; and finally Ithaca. Each of these scenes is placed in a definite locality, the natural features of which seem to the author to be conclusively and exclusively indicated by the poem. The hero's wanderings from Thrace to Jerba, Jerba to the Phlegrean Fields, the Phlegrean Fields to Stromboli, Stromboli to N.E. Sardinia, Sardinia to Terracina, Terracina to Lake Avernus and back again, thence to the Straits of Messina, and lastly to the Isle of Perceps near Gibraltar and back by Corfu to Ithaca (the real one, not Prof. Dorpfeld's Leucadian Ithaca), makes strange pattern on the map ! There is no particular reason why all these identifications should not be correct, but there is also seldom any particular reason why they should be so. One cannot help feeling that with a little *bon sens* the whole *Odyssey* could be localised equally well almost anywhere—say, round the shores of the Black Sea. Finally M. Béraud summarises his theory that (1) the *Odyssey* is based on a Phœnician *periplos* ; (2) it is the work of one Homer ; (3) it appeared in the ninth century and probably in Greek Asia Minor. The book, whatever credit be given to its confident topography, contains a vast amount of interesting comment on the *Odyssey*, and deals with a wide range of knowledge ; but if the Semitic philology, on which it largely rests, were vouched for by other Semitic experts, and the Egyptology were based on less popular authorities, we should find them more convincing.

Aegina—das Heiligtum der Aphaia. Unter Mitwirkung von ERNST R. FIECHTER und HERMANN THIERSEN, herausgegeben von ADOLF FURTWÄNGLER. 2 Vols. *Text*, pp. ix+504; 1 map, 6 full-page illustrations, and 413 figures in the text; *Tafeln*, pp. xx+130 plates. Munich: 1906. 120 m.

These volumes contain in the first place a thorough and scientific record of the Bavarian excavations of the well-known temple on Aegina in 1901; in the second, the results of a detailed study of all the products of the earlier excavations by Cockerell and von Haller in 1811, as now preserved in Munich, in the light of new data and of modern methods. These results are startling and even revolutionary in character, but it is impossible to doubt their correctness in the main: and they give the book a foremost place among the archaeological works of the present generation. The most general interest will be aroused by Prof. Furtwängler's treatment of the sculpture from the pediments. The arrangement of these groups, as restored by Thorvaldsen, in Munich, has become familiar from its reproduction in all histories of art, and has been regarded as typical of early pedimental composition: but it only represents one of Cockerell's various suggestions, and really rests on no evidence at all. With the help, not only of the extant remains from Aegina, but also of a study of other early pediments and their principles of composition, and of the treatment of similar subjects on contemporary vases, Prof. Furtwängler has made a new reconstruction of the east and west pediments which, if not certain in all its details, must be accepted in its general character. For the rigidly conventional arrangement of the older system we find substituted a division into lively groups, and a motion from as well as to the centre which give one a very different notion of pedimental composition. The existence of figures from a third pedimental group of combatants seems well attested; and the suggestion that it was the unsuccessful one in a competition, set up in front of the temple, is interesting. The much disputed question of the dedication of the temple seems to be settled by the discovery of inscriptions with the name of Aphaia: the site of the temple of Zeus Panhellenios has been found near the Oros. As to that of Athens, mentioned by Herodotus, Furtwängler now doubts its existence, and would accept Kütz' emendation of *Aegina* for *Alphainos*.

The architectural study of the temple, and of other buildings earlier and later, is carried out very thoroughly by Dr. Fiechter. The chief problem is the curious arrangement of the opisthodomus and the door, unsymmetrically placed, leading into it from the back of the cella: this is explained as due to a change of plan, made during the building, in order to accommodate some subsidiary shrines. The minor antiquities are carefully treated by Prof. Thiersch. Perhaps the most interesting are some fragments of Naxos vase with inscriptions painted upon them, and so apparently made to order. It is, however, incorrect to state that no other vases from Naxos have been found on Greek soil, except on the Athenian Acropolis: there are some among the pottery from Rheneia, buried there when the Athenians purified Delos.

The illustrations are mostly excellent; the only fault to be found is with the somewhat crude colouring of the plates with coloured sculpture; however satisfactory as diagrams, their artistic effect is not good. The form is to be commended—two moderate-sized and uniform volumes, instead of an unwieldy folio atlas and a smaller text.

Architecture East and West: a collection of essays written at various times during the last sixteen years. By R. PHENÉ SPIERS, F.S.A., F.R.I.B.A. London: Batsford, 1903. Pp. xvii+269. With a portrait and 116 illustrations, 33 full-page plates.

Strictly speaking, most of the essays in this book have no direct relation to Hellenic studies, but some of them will interest all those who care to trace the development and influence of Hellenic and Byzantine forms in east and west. The essays are placed in

order of their publication; and, as each is independent and complete in itself, this course may be justified; but it might have been more instructive to begin with that on the influence of Greek art on the Persian order, which corrects many current errors and misapprehensions, to follow it with the essay on Sassanian architecture, and so on. These two articles are both helpful to the understanding of the true relations between east and west; they are followed by most interesting studies of the relation and contrast of forms found in Syria, in Byzantium, in N. Italy, and in the S. of France. The essays were mostly written for architectural students, and some of them require special knowledge to be appreciated in detail; but this does not prevent their being also useful to the layman who wishes to obtain a notion of some of the most interesting problems of architectural relations and influences.

Primitive Athens, as described by Thucydides. By J. E. HARRISON. Pp. xii + 168, with a frontispiece and 49 illustrations, including several plans. Cambridge University Press, 1905. 6s. net.

Miss Harrison, in her preface, expressly renounces the intention of issuing a second edition of her *Mythology and Monuments of Ancient Athens*, on the ground that the needs it met are now supplied, in English at least, by other recent books. But these recent books do not, in her opinion, do justice to Prof. Dörpfeld's theories upon some crucial points of Athenian topography: she has therefore restated these theories with confident eloquence; and incidentally has taken the opportunity of giving a popular and interesting account, not only of topographical questions, but also of such matters as the most recent reconstructions of the early pediments on the Acropolis, and the mythological investigations which she has made peculiarly her own. There has been a good deal of discovery and study within the last two or three years that is not controversial in character, and of this also Miss Harrison gives the most recent summary. Her book well fulfils its avowed intention of giving the scholar a vivid impression of primitive Athens. As to the controversy from which it starts, those who wish to form an unbiased judgment would do well to supplement Miss Harrison's impassioned advocacy by a study of Mr. Frazer's judicial summary of the evidence.

A History of Architectural Development. By F. M. SIMPSON. Vol. I. Ancient, Early Christian, and Byzantine. Pp. xvi + 272; 180 illustrations, many full-page. London: Longmans, Green, and Co., 1905. 12s. 6d. net. [The Architect's Library.]

This book is a brief summary, intended mainly for architects; Greek architecture is dealt with in only about fifty pages: it does not therefore supply the long-felt need of a good popular work on Greek architecture. Even within these limits there are some curious errors. Thus the early Ionic column from the temple of Apollo at Naucratis is classed as Egyptian, if not Ptolemaic. It is certainly neither, but archaic Greek. Again, even on this scale, the essential differences between the Attic Ionic of the Erechtheum and the more ordinary type might have been emphasised. The small size of the theatre of Dionysus at Athens is dwelt upon, and it is said to be only 165 feet across at the top: really it is more than twice this, and the largest extant in Greece. On the other hand, Prof. Simpson has an interesting theory as to the alteration of the original plan of the Erechtheum, which is more moderate than Dörpfeld's, and is made independently. In the chapters on Byzantine architecture there is much matter; but the students for whom the book is intended would probably have been grateful for some clearer general exposition of the various influences and the theories held about them by modern critics.

Geschichte der griechischen Kunst. By WILHELM KLEIN. Vol. i. Die griechische Kunst bis Myron. Pp. 473. Vol. ii. Die griechische Kunst von Myron bis Lysipp. Pp. 407. Leipzig: Veit & Co., 1904, 1905. 13 m. and 11 m.

The author has undertaken the task of writing the general history of Greek art with a running pen, but yet on a considerable scale. In the first volume he touches lightly on the ethnographic questions which surround the beginnings of Greek art, and views the subject in successive chapters as Greek art 'before the reception of the Mythos,' 'between the reception of the Mythos and the beginning of marble sculpture,' and 'at the courts of the Tyrants.' For the periods before the Persian wars considerable use is made of the remains of the lesser arts, and especially of vase paintings. After the Persian wars attention is confined to the sculptors and greater painters. A third volume is announced, which will deal with the Hellenistic period.

The work is a useful and exceedingly interesting survey of an enormously wide field. It is open to question, however, whether the lines of the book are wisely drawn. The treatment is too detailed for the purposes of a manual, but omits the formal statement of facts demanded of a history. Illustrations are altogether wanting, and the book can only be used satisfactorily by a reader who has access to an archaeological library.

Catalogue of the Sparta Museum. By M. N. TOD and A. J. R. WACE. Pp. viii+249, with 85 figures. Oxford: Clarendon Press, 1906. 10s. 6d.

This Catalogue was a necessary preliminary to the survey of Laconia which has been undertaken by the British School at Athens. Though not in form an official publication of the School, it is in fact a part of that enterprise. Mr. Tod is responsible for the inscriptions, and Mr. Wace for the sculptures. The work consists of (1) an introduction to the inscriptions; (2) the text of the inscriptions (in cursive type only for the most part) with such commentary as is required to justify the text, which is in all cases based on a careful re-reading of the stones; (3) full indices; (4) an introduction to the sculptures; (5) the catalogue of the sculptures, which is accompanied by a considerable number of blocks in the text; (6) a full index to the sculptures (it may be questioned whether any one will profit by such an entry as 'Imperial period' followed by some 260 references); (7) an account of the miscellaneous antiquities in the Museum, such as the votive lead figures from the Menelaion and elsewhere. The book is indispensable for the study of Sparta and Laconia.

Musée National du Louvre. Catalogue des Vases Antiques de Terre Cuite. Par E. POTTIER. 3me Partie: L'École Attique. Pp. 334. Paris: Librairie-Imprimerie Réunies, 1906. 3 f. 50 c.

A catalogue, even a catalogue raisonné, is not always to be regarded as a piece of literature, or as entertaining reading for leisure moments; but M. Pottier's latest instalment of his description of the Louvre vases is a notable exception, and the writer has with much satisfaction as well as profit devoted some idle holiday hours to its perusal. Strictly speaking, it is not a catalogue but a treatise on Greek vases illustrated by, and serving as a guide to, the Louvre collection; but this detracts neither from its merits nor its usefulness.

M. Pottier has now reached the period which to many students is the most interesting in the history of Greek vases, that of the Attic Schools, or the black-figure and red-figure periods. In his two previous volumes he discussed the primitive and earlier Greek fabrics, and the present one includes the Attic vases of the sixth and fifth centuries found on Italian soil, and therefore imported from Athens during the period when these products found favour in Etruria. The volume opens with a sketch of the growth of the Athenian potteries under Peisistratos, followed by a discussion of painting in the black-figure method

and its place in the history of art: the author rightly emphasises the fact that this method must have continued well into the fifth century, side by side with the red figures, by which it was by no means entirely displaced. Next we have some illuminating remarks on technical processes, and on the conditions under which the Athenian potters worked. In the latter connexion the author has done good service: by the distinctions he draws between potters and painters, a distinction often overlooked or confused hitherto. His conclusion is this: In the case of the formulae *ὁ δαίμων ἐποίησε καὶ ὕψαψε* and *ὁ δαίμων ὕψαψε* we are left in no doubt as to the artist's share in the production of the vase; but the more frequent *ὁ δαίμων ἐποίησε* is not so easy to interpret. Usually it may be assumed to refer to the master and director of the pottery who himself designed the vase and overlooked the work of his subordinates (see pp. 697 ff.).

Then follows a description of the black-figured vases (Salle F), carefully classified and grouped, in a roughly chronological order. The red-figured vases (Salle G) are similarly dealt with, the introduction to this part (pp. 817-879) being mainly concerned with the style and products of the known artists, Euphronios, Duris, etc., as well as with such matters as chronology, drawing, and subjects. Throughout, the theme is treated with the breadth of knowledge, sanity of judgment, and charm of style which characterise all M. Pottier's work. Our only regret is that space forbids to enlarge further on the merits of this really delightful volume.

A Catalogue of the Greek Coins in the British Museum: Catalogue of the Greek Coins of Phrygia. By Barclay V. Head. Map and 53 Plates. London: Printed by Order of the Trustees, 1906. Pp. cvi+492. 49s.

This volume is the twenty-fifth Greek Coin Catalogue issued by the British Museum. It is also the last of the great series for which Mr. Head will be officially responsible. As such it is a fitting crown to a long career of distinguished public service. The coinage of Phrygia has little attraction for the ordinary collector. The district was not opened up to civilization until the days of Alexander. Consequently no coins were struck till the art of die-cutting had long passed its zenith. The mints were not numerous at first, and with two or three conspicuous exceptions they were comparatively inactive until Roman times. Under Imperial rule Phrygia awoke to an era of extraordinary prosperity. Mints multiplied and coins were issued abundantly. Many of the issues were obviously made in connexion with recurrent religious festivals,—a circumstance that has led to the use of not a few interesting mythological types. The inscriptions, too, for a similar reason are often important. A careful study of them is calculated to throw a flood of light upon municipal organization in the Eastern provinces. In his thorough and comprehensive Introduction Mr. Head is able to give us astonishingly long lists of names of individual magistrates, while his Index of Remarkable Inscriptions contains material for investigation on several distinct lines. In little more than thirty years the total number of Phrygian coins in the trays of the Museum has more than trebled itself. Mr. Head's volume gives a detailed description of 2148 specimens. When it is mentioned that Mionnet was only able to record 1626 varieties in all, it will be seen how rich our national collection has become,—largely (be it added) through Mr. Head's own fostering care. So far as the compiler's share is concerned, the workmanship of the book touches the highest level of excellence. The plates are good, but not so good that one does not wish them better. The map is capital.

Historical Greek Coins. Described by G. F. Hill. 13 Plates. London: Constable, 1906. Pp. xx+182. 10s. 6d. net.

This book is primarily intended for the general student of Greek history, who cannot reasonably be expected to be also a specialist in ancient numismatics. Its purpose is

to show by actual illustrations the kind of evidence that is to be looked for from coins, and to bring home to its readers the importance of asking, in any serious discussion of a historical problem, 'Can we get help from the coins?' One hundred specimens in all are discussed. Their selection has been determined by a desire to choose 'pieces which, either by the mere fact that they were issued, or else by information conveyed through their fabric, types, inscriptions, or standard, actually add their quantum to our knowledge of the period to which they belong.' Mr. Hill writes clearly and with fullness of knowledge. In each discussion he brings us abreast of the most recent researches, and at the same time exercises an independent judgment. The result is a stimulating and useful volume. How wide is the range of interest can best be indicated by mentioning that such various personalities as Croesus, Themistocles, Pharnabazus, Epaminondas, Timoleon, Flamininus, and Pompey figure in the pages, while the historical events touched upon include the 'crowning mercy' of Himera, the Athenian disaster in Sicily, and the formation of an Anti-Spartan league after the battle of Cnidus. The book is admirably printed. The half-tone plates, though naturally less effective than colotype, are remarkably good of their kind. A glossary and an index are provided.

Die hellenische Kultur. Dargestellt von FRITZ BACHMANN, FRANZ POLAND, RICHARD WAGNER. Pp. x+489. With 7 coloured plates, 2 maps, and about 400 illustrations. Leipzig and Berlin: 1905. 12 nl.

This is an attempt to give in a single volume a comprehensive survey of Greek history, art, and literature from the earliest times to the loss of Greek independence. The work is divided into three great periods, viz. (1) The Early Age of Greece, comprising the remains of Pre-Mycenaean and Mycenaean civilization; (2) The Greek Middle Age—roughly from 1000-500 B.C.; (3) The Culminating Period (500-338 B.C.). Each of the three authors has taken charge of one of the three special sections into which the two last-named periods have been divided. One deals with the development of the state and of religion, the second with Art and Architecture, the third with Literature. Such an arrangement has the advantage of giving unity to the work. No pains have been spared in incorporating the results of recent researches, and an excellent collection of illustrations has been got together. The weak point is to be found in the arrangement of the latter. It is certainly discomfiting to find late red-figured vases, fourth-century coins, and Graeco-Roman jewellery joined with a store-chamber of the Palace at Knossos to illustrate the Period 750-500 B.C. The book is intended for use in the school and the home; and as a whole fulfils its aim with success. The addition of bibliographies might have made it useful to the student and the scholar also.

Melandra Castle. Report of the Manchester and District Branch of the Classical Association for 1905. Edited by R. S. CONWAY. With an Introduction by the Rev. E. L. HICKS. Manchester: University Press, 1906. Pp. xvi+167. With Map, Frontispiece, and numerous Illustrations. 5s.

This little book deserves a warm welcome. It is pleasant to find the younger universities taking a serious interest in archaeology, and pleasant to acknowledge the first real fruit that the Classical Association has brought forth. The site of Melandra—a Roman *castellum* in the uplands of Derbyshire—was partially explored by Mr. John Garsjard in 1899. The present Report gives an account of further excavations carried out by a Committee of the Classical Association in 1905. One could have wished that the harvest had been richer. The actual results were not very important. Such as they were, however, they are here set forth with a fullness and an enthusiasm that merit high commendation. Apart from Canon Hicks and the compiler of the excellent index, there are no fewer than seven contributors, each of whom deals with one or more special aspects of the subject. These include such

well-known experts as Prof. Boyd Dawkins and Dr. Haverfield. An incidental drawback to the system adopted is that it entails a certain amount of repetition. The same fact is frequently mentioned independently in two or three different articles. Mr. F. A. Bruton gives a clear and careful account of the digging. The rampart is the structural feature to which most interest attaches, and in regard to that the last word is still to say. The pottery is admirably described by Mr. Hopkinson. This is one of the best portions of the book. Its chief weakness is the writer's too great readiness to regard the latest theories as final. Excellent as is the work done recently by Dragendorff and Déchelette, their inductions have still to be tested by observation over a wide area. We are told, for instance, by Mr. Hopkinson that 'Bowls [of "*terra sigillata*"] of shape 29 are found in Britain as far north as York, but beyond York (*i.e.* in the parts of Britain occupied later than 80 A.D.) only bowls of shape 37' (pp. 81 f.). Fragments of shape 29 occur at more than one site on Hadrian's Wall: if we mistake not, there are several in the Blackgate Museum at Newcastle. Others have been found recently at Newstead near Melrose. Seven or eight years ago quite a number were discovered at Camelon beyond the Scottish 'Vallum.' These facts may not weaken the force of Dragendorff's inference. Possibly they may strengthen it. But they are facts, and they should not be ignored. The very interesting series of weights provides Prof. Conway (who is a singularly competent editor) with material for ingenious speculation, and he also discusses the coins. We confess to grave doubts about the 'Jewish' coin. If it were really Jewish, the fabric should be unmistakable. Nor are we inclined to bow the knee to the British Museum in regard to the Roman origin of the curious bronze plate from 'Pym's Parlour.' But these are small points. The book is a most creditable piece of work. And the printing and the general 'get-up' are all that could be desired.

For other books received, see List of Accessions to the Library.

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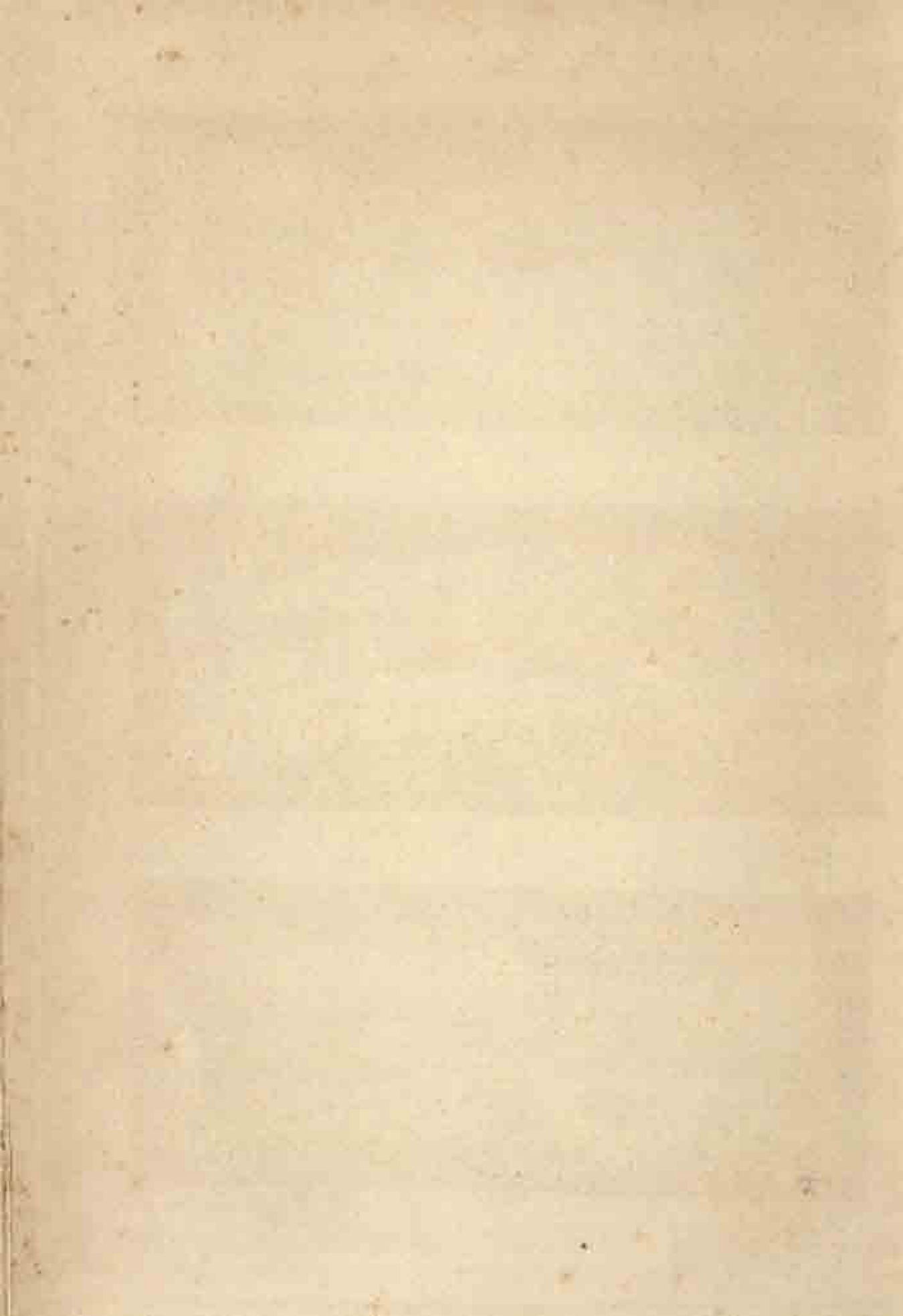
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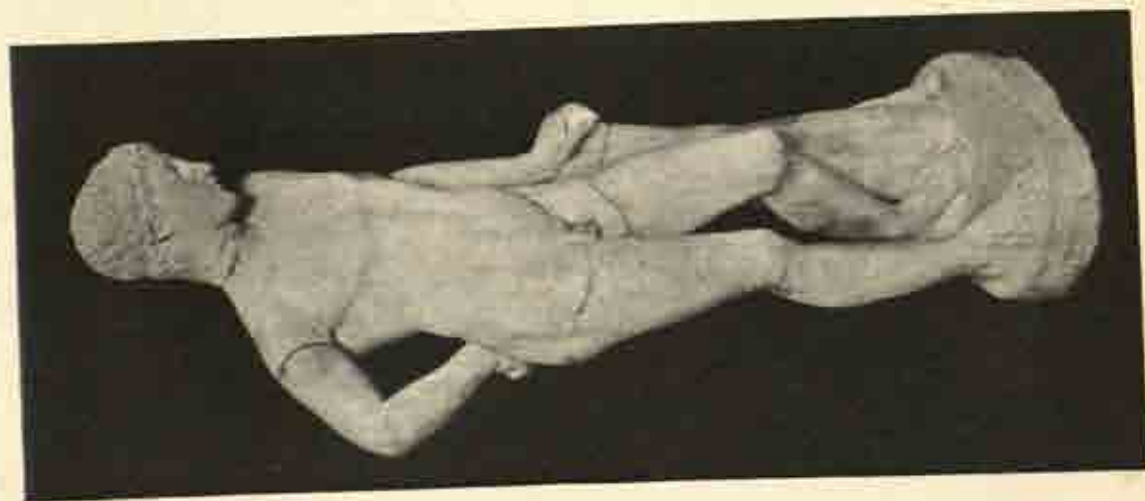
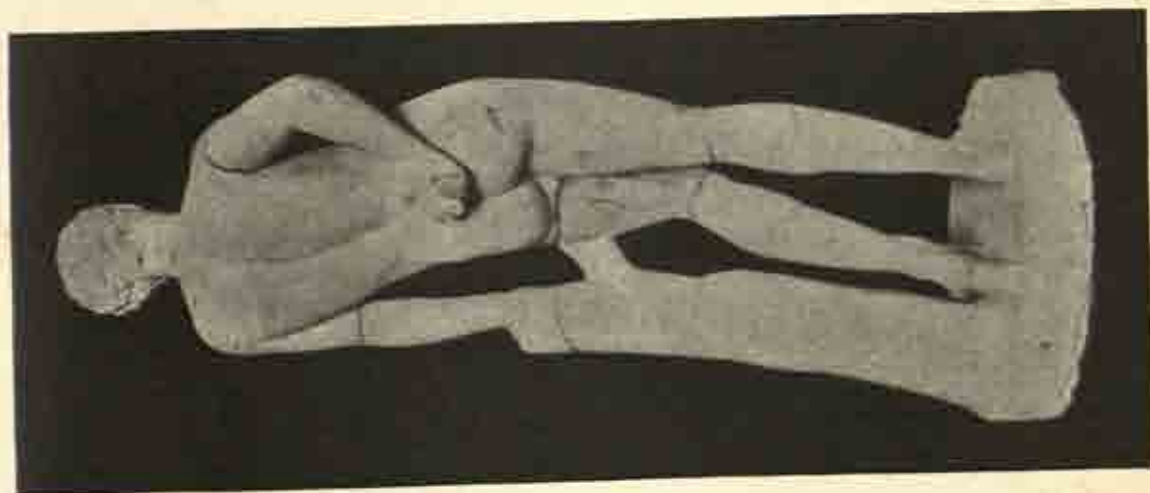
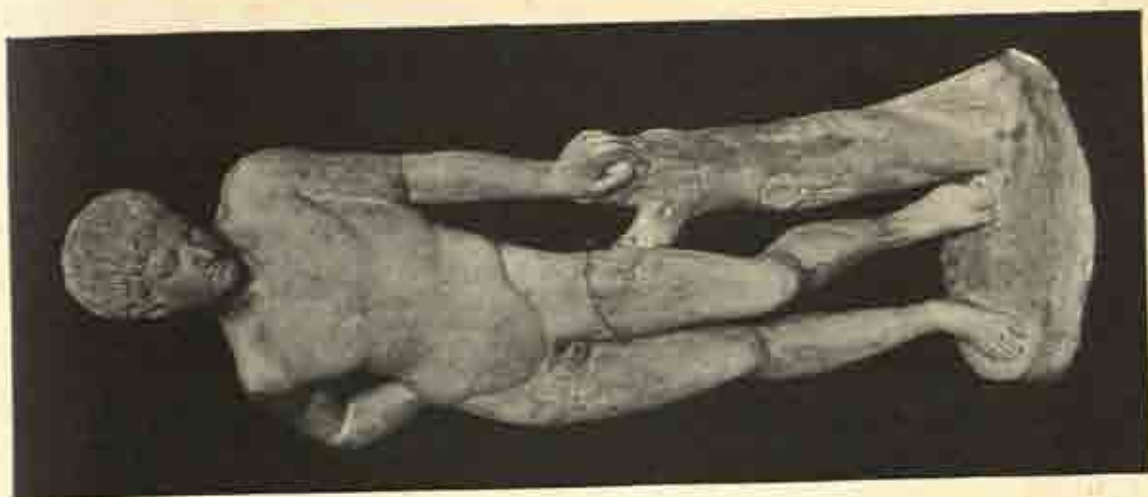
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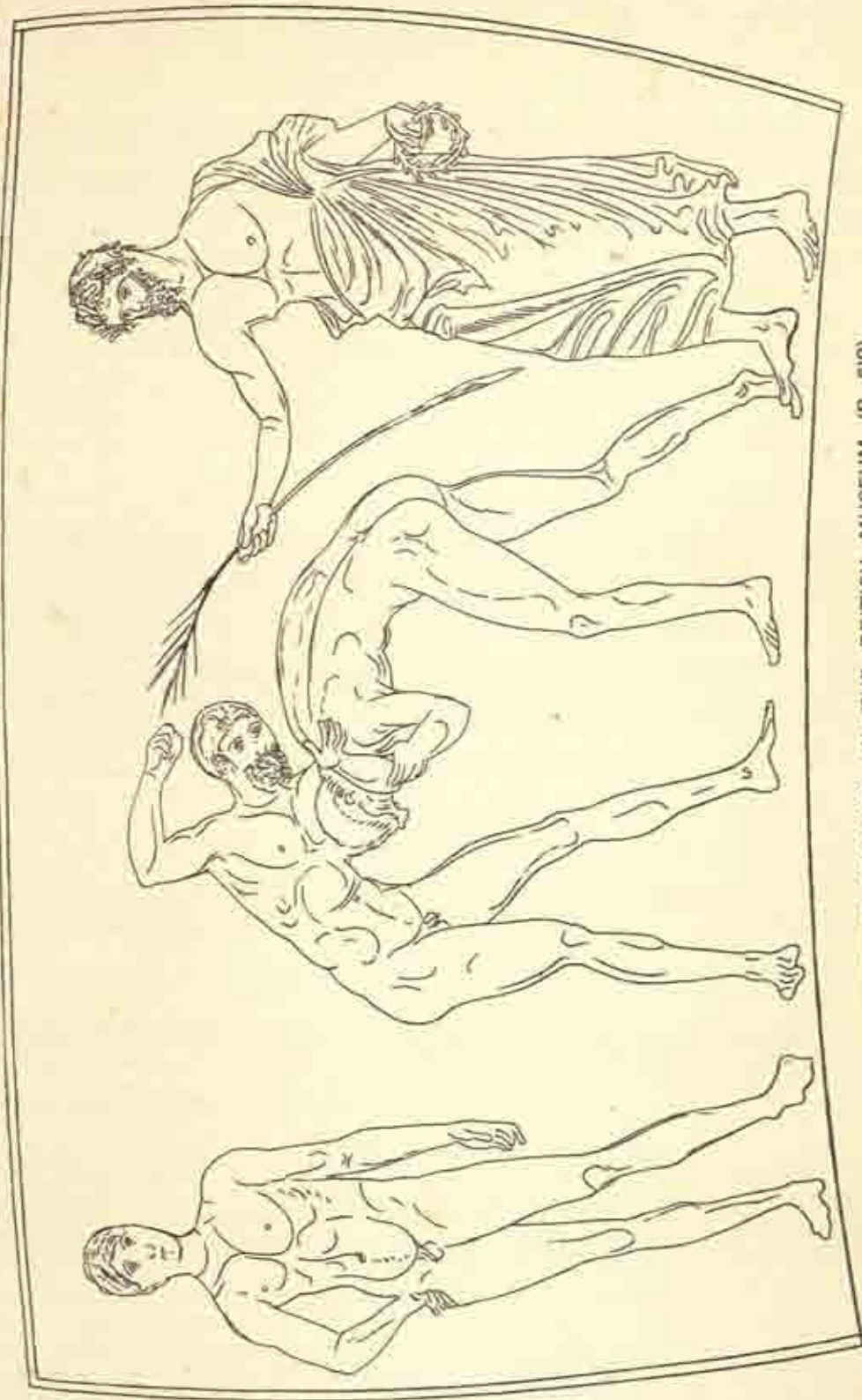




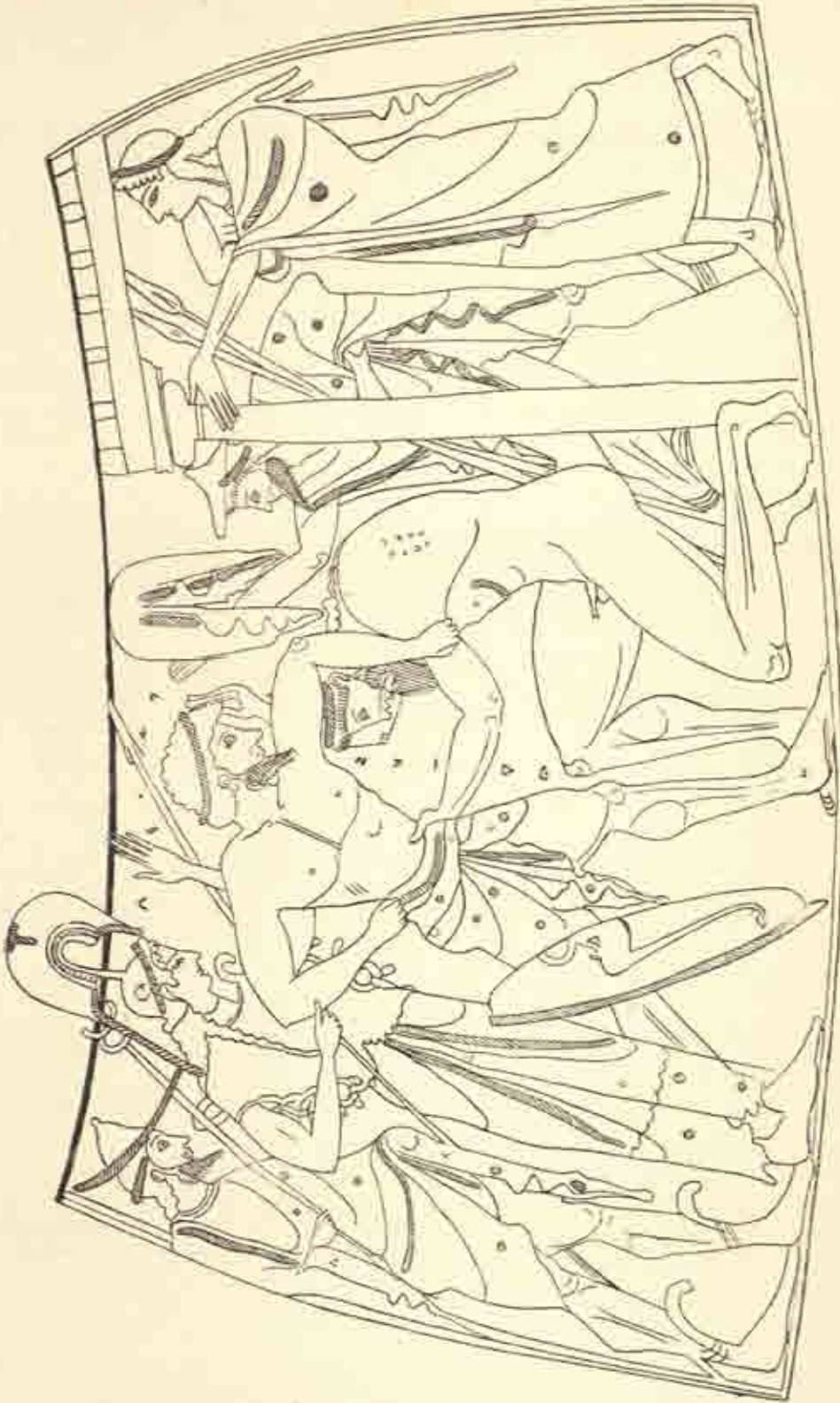
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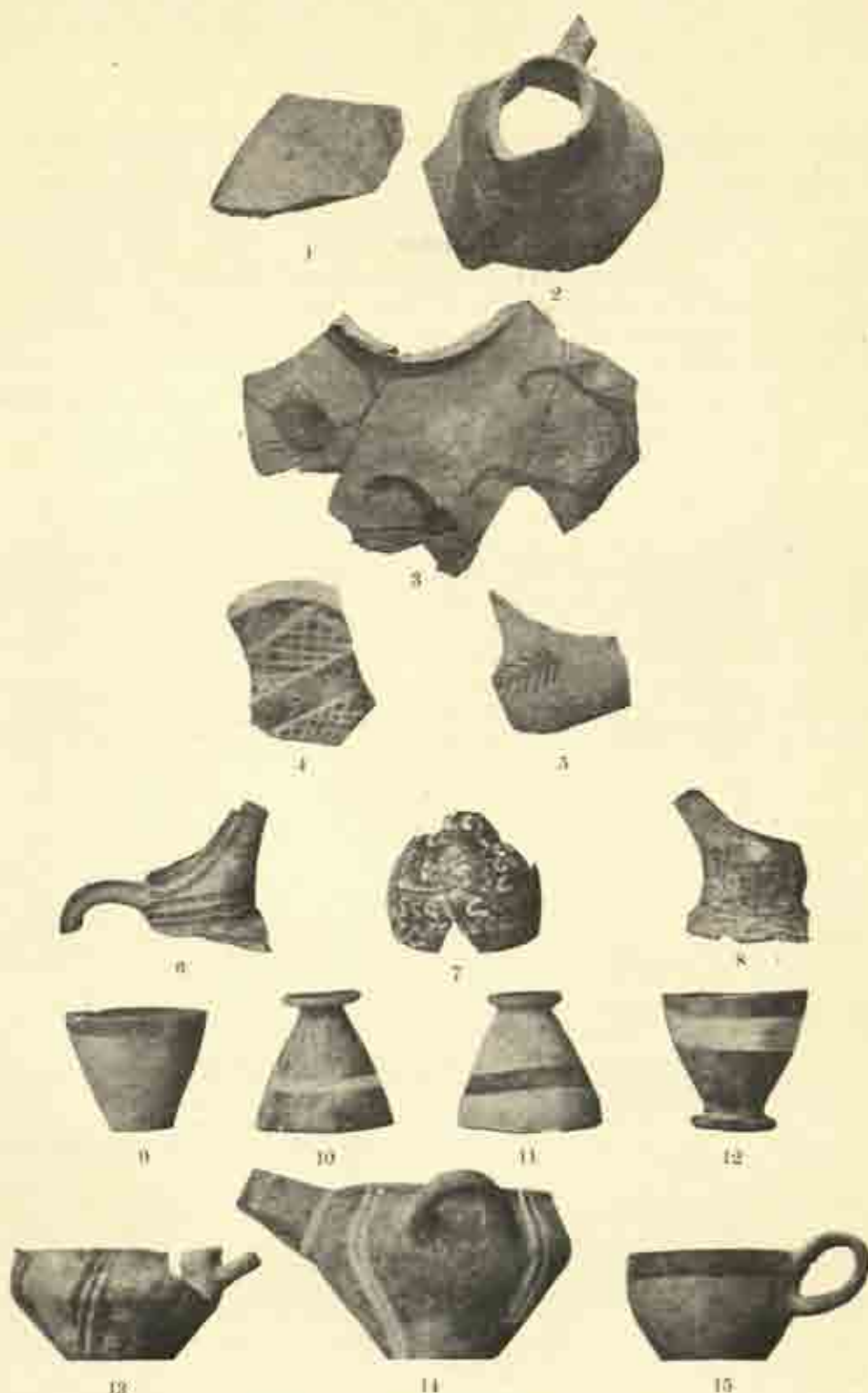




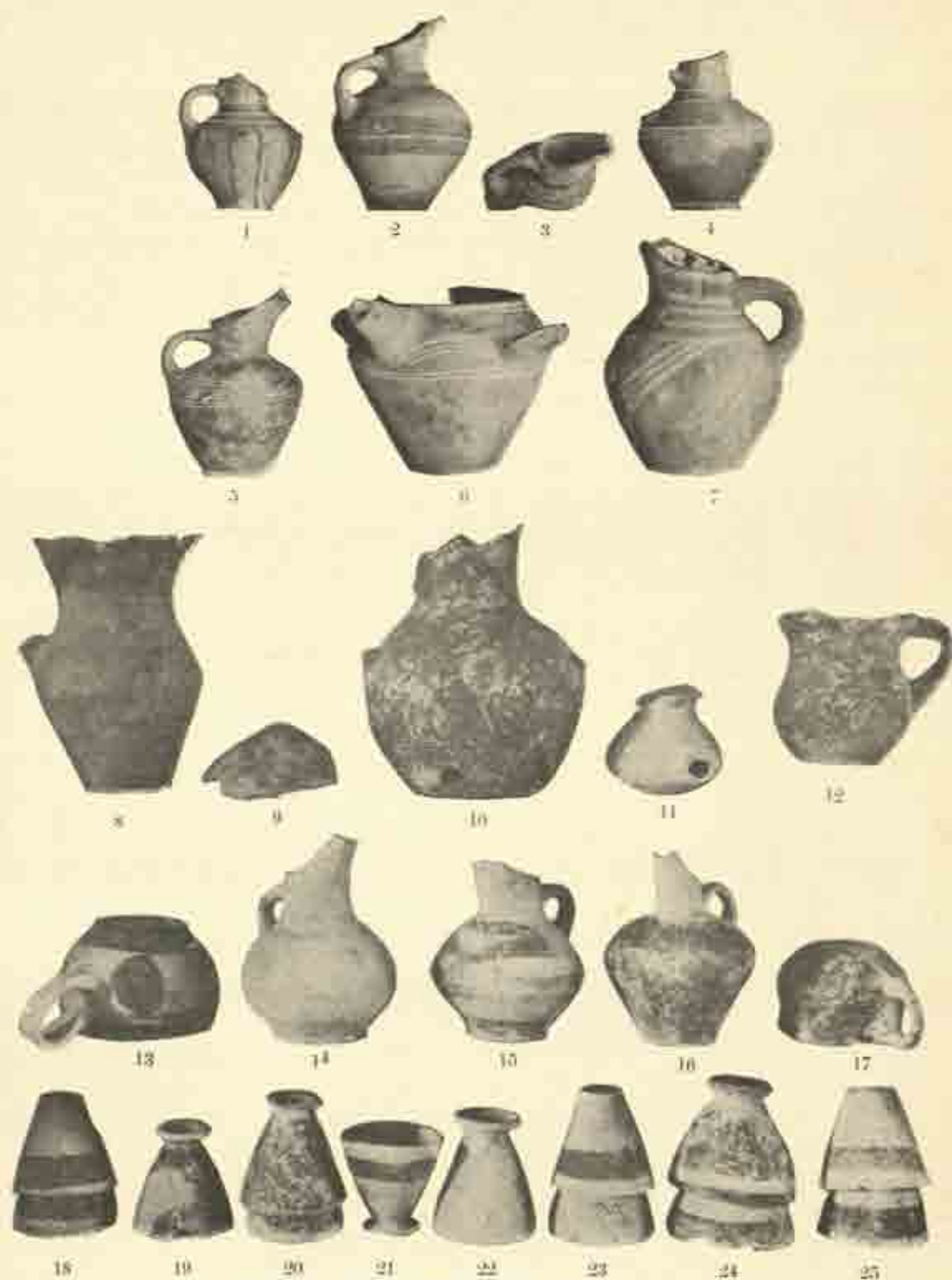
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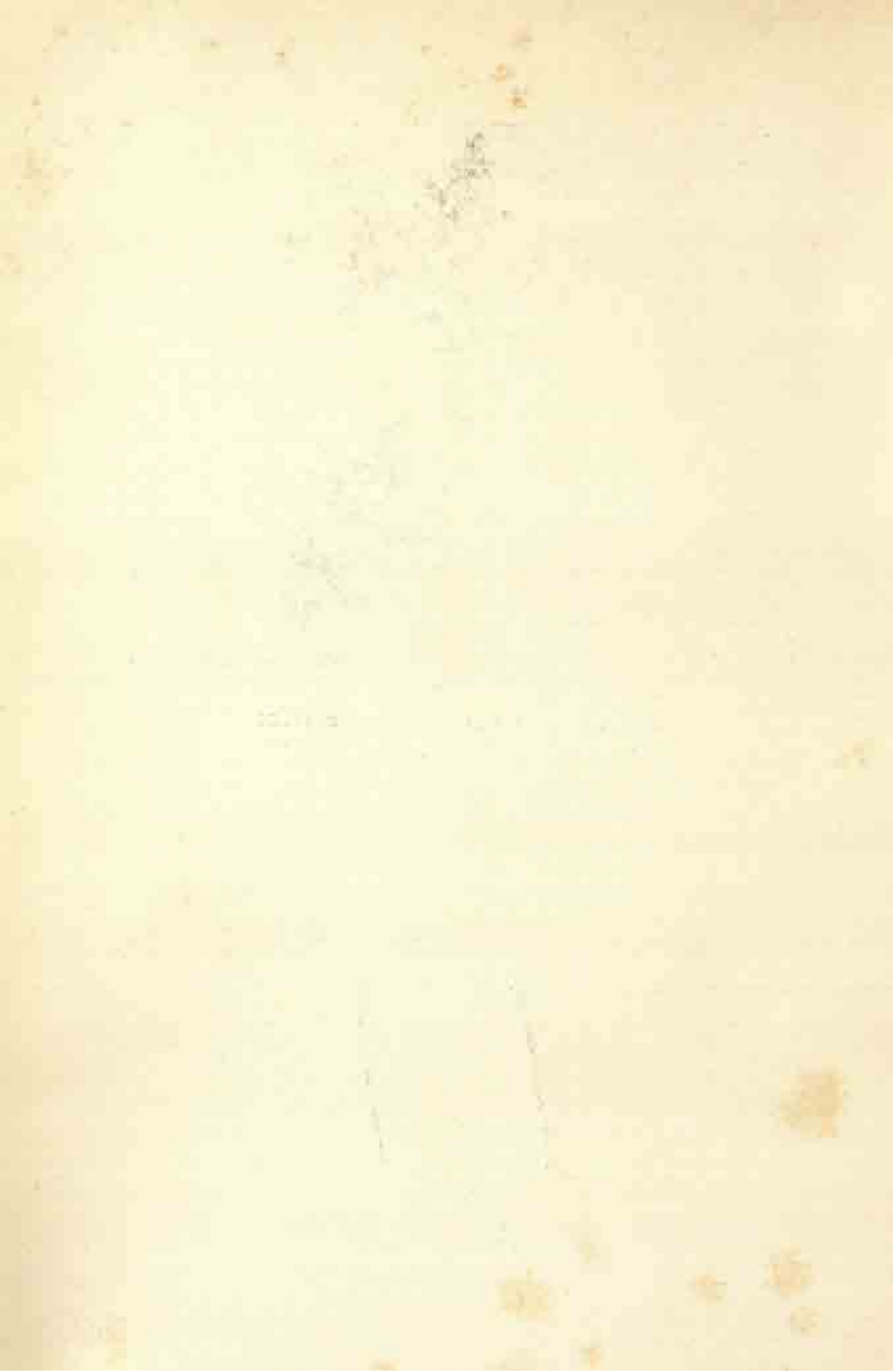
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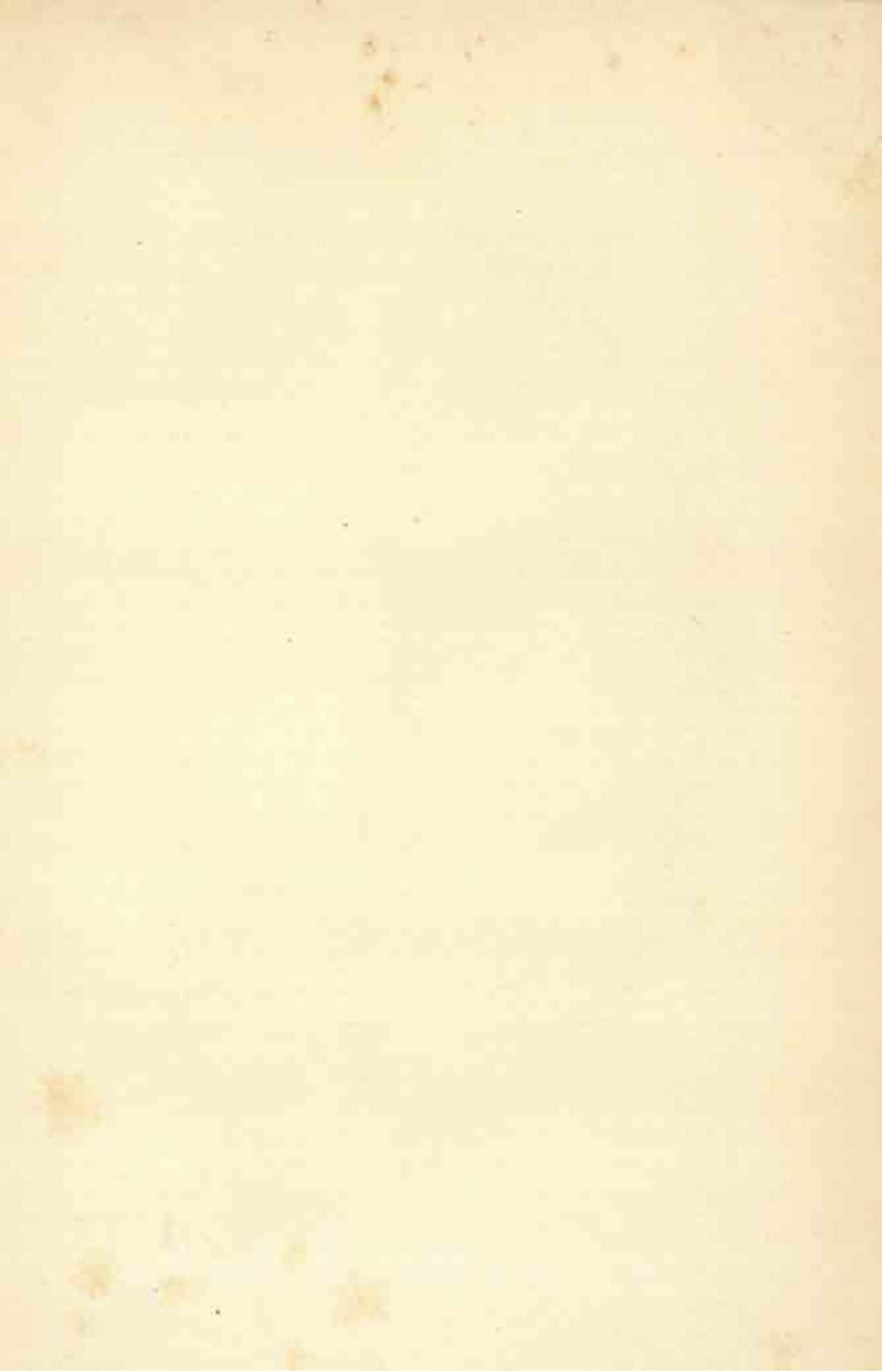


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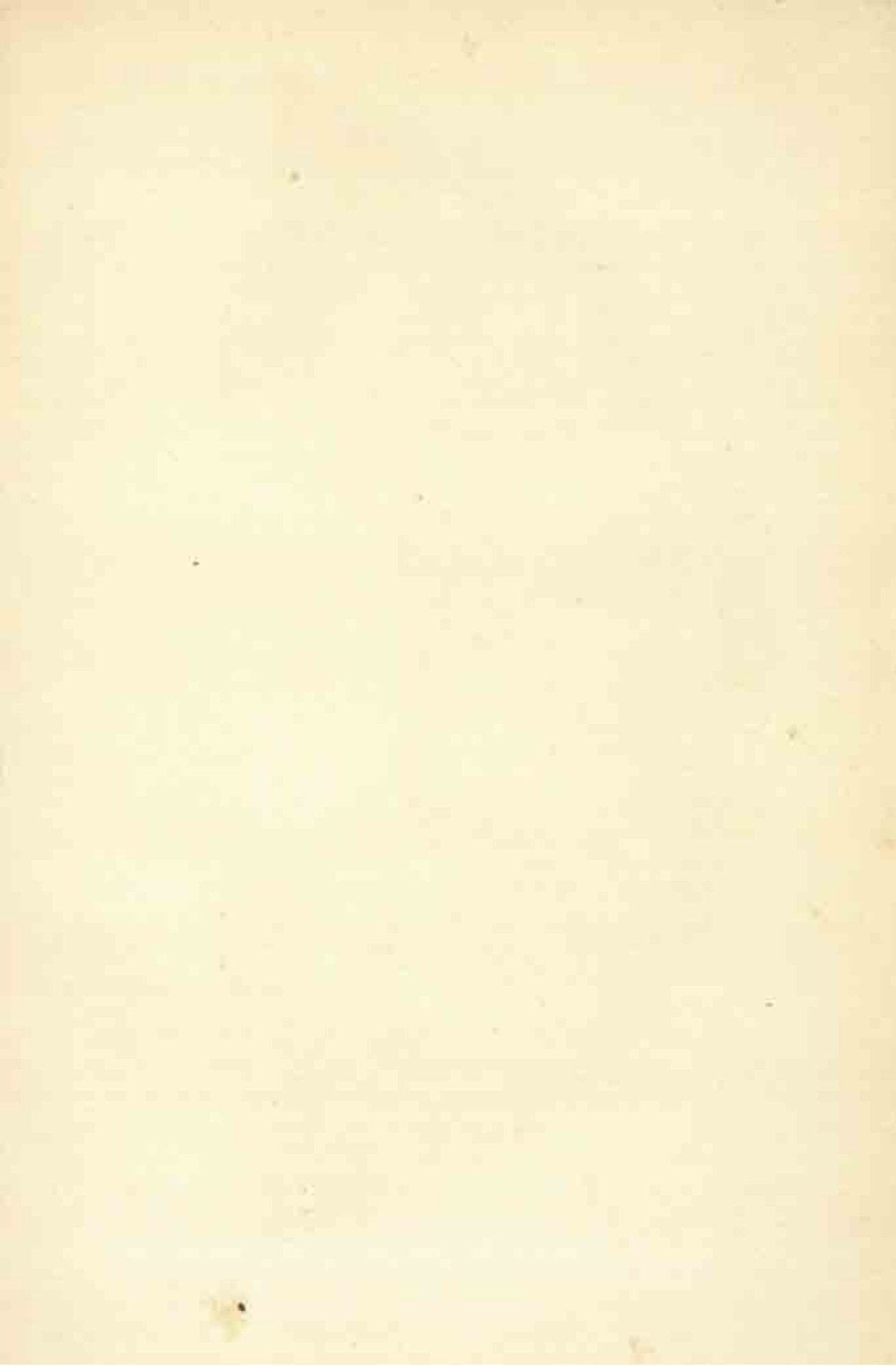




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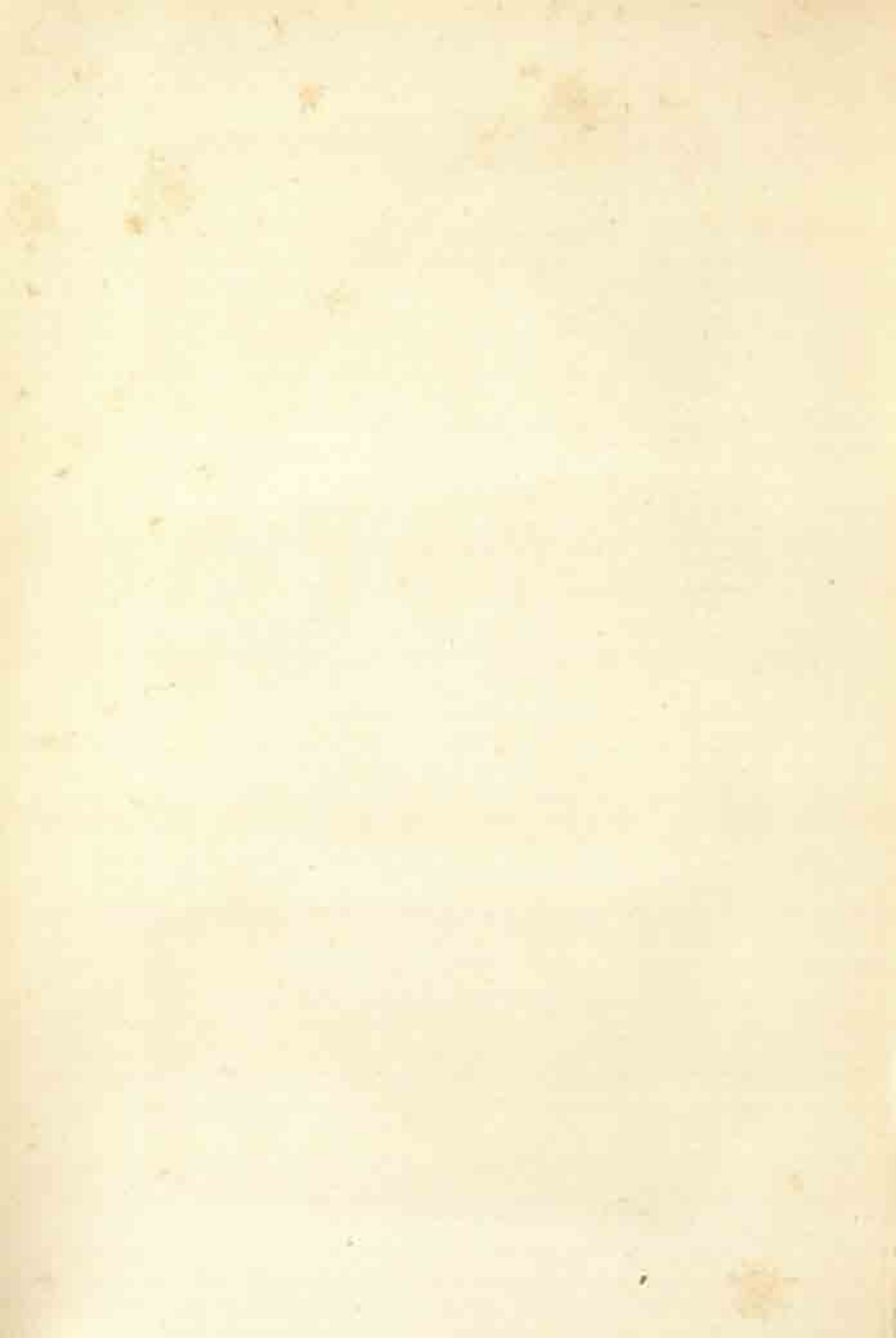
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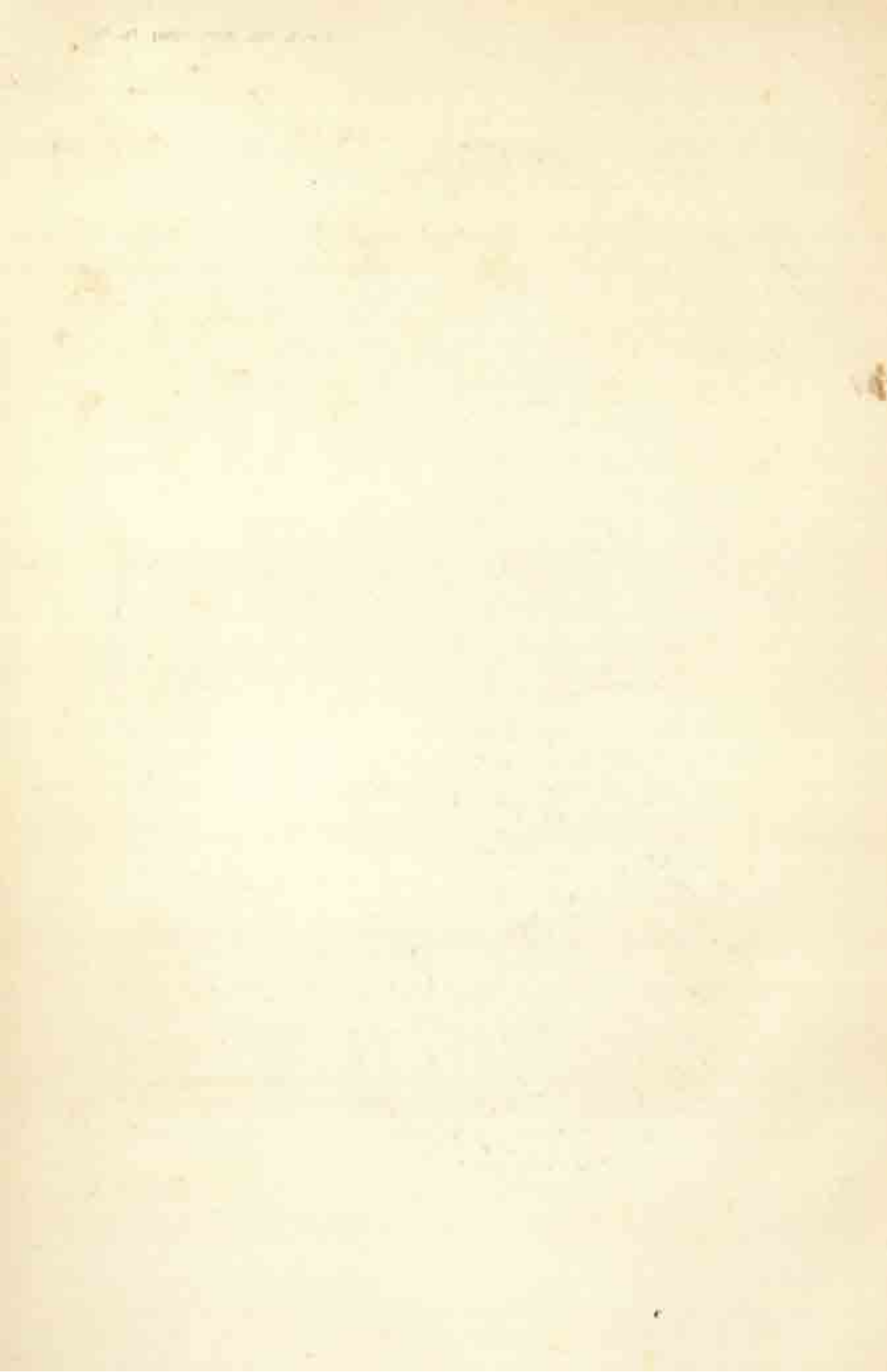


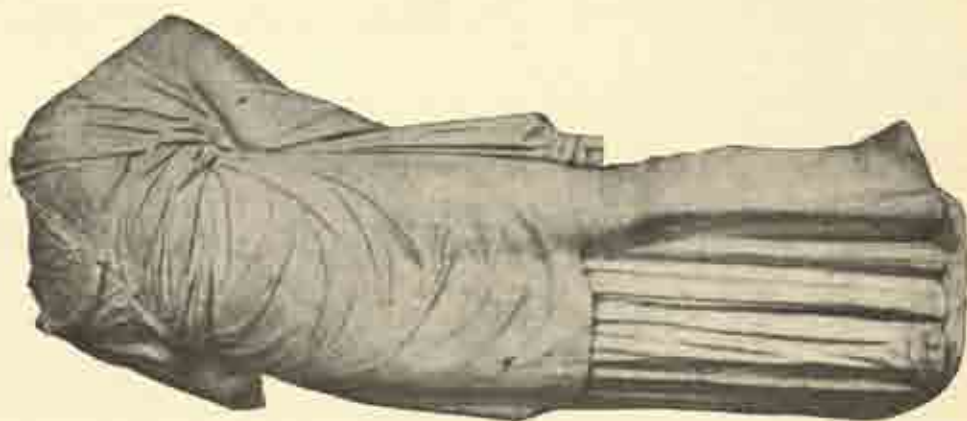
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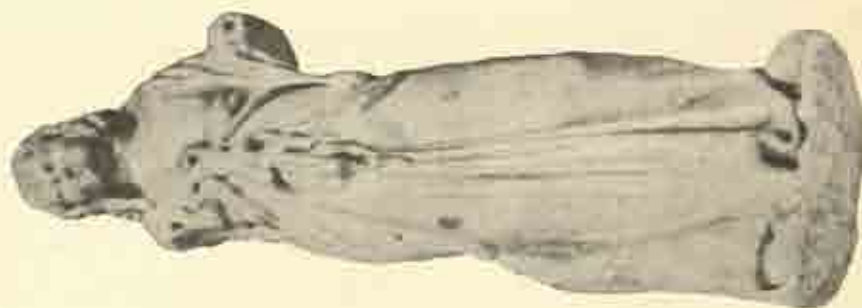


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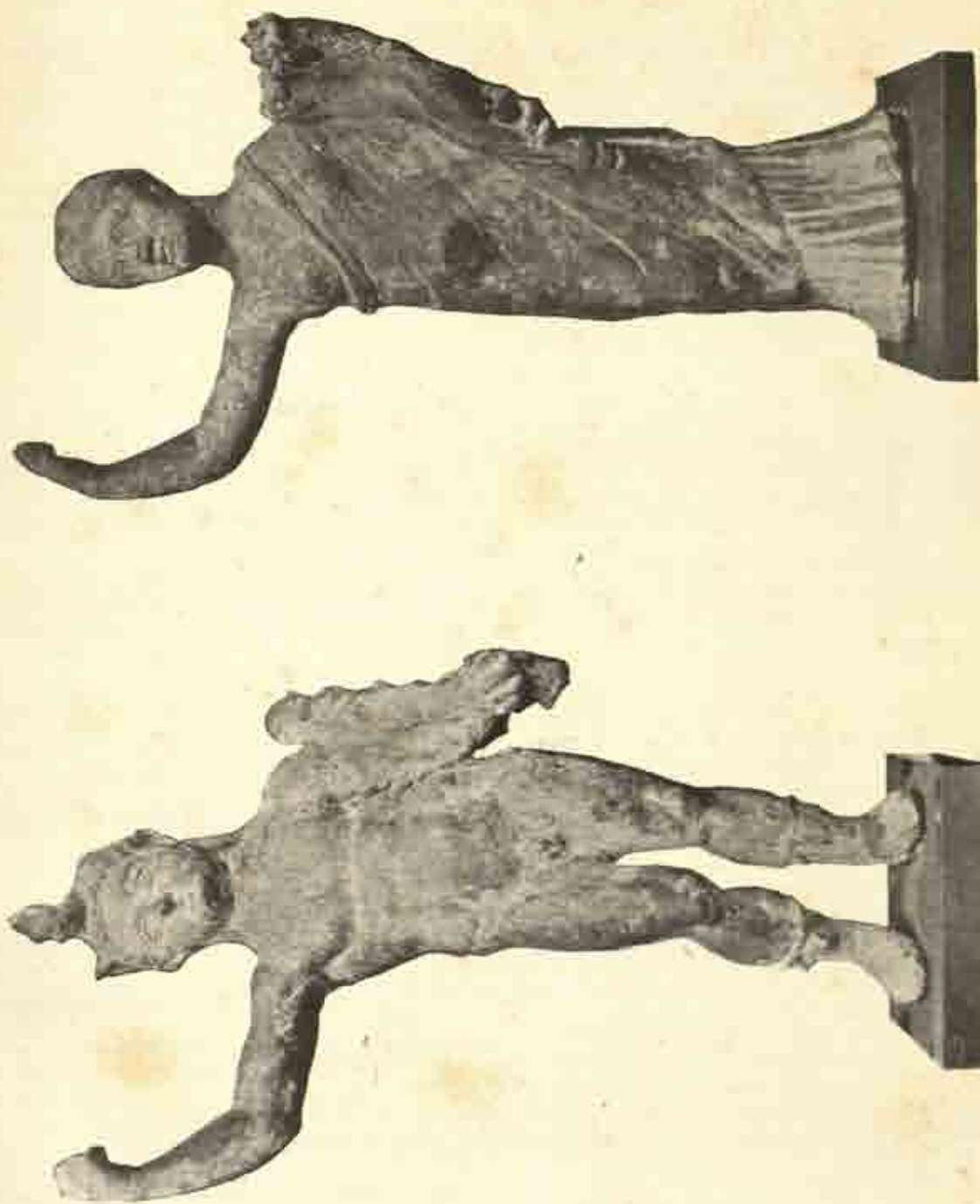
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